SAVA-29

SERVICE MANUAL

US Model
Canadian Model
E Model

(Center) (Rear) (L-ch) (R-ch)

This unit is composed of the front speaker and the following units.

REAR SPEAKER	SS-SR171
EXTERNAL CENTER SPEAKER	SS-CN15AV

SPECIFICATIONS

Amplifier section

Continuous RMS power output

Stereo channel	20 Hz-20 kHz, 0.8% THD 23 W ×2 (Front, 8 ohms) + 24 W (Sub woofer, 8 ohms)
Surround channel	20 Hz-20 kHz, 0.8% THD 24 W (Center, 8 ohms) 13 W ×2 (Rear, 16 ohms)
TOTAL	20 Hz-20 kHz, 0.8% THD 120 W

Input sensitivity/Impedance

1/2/5.1 CH	575 mV, 45 kohms
CONTROL S (for U.S. and Canadian customers only)	Only for Sony XBR² and Sony Projection TV

Output

1	575 mV, 1 kohms
External center	24 W (8 ohms 20 Hz-20 kHz, 0.8 % THD), 8-16 ohms
Rear speaker	Accepts only supplied SS-SR171
Wireless rear speaker	Accepts only Sony models
R-ch speaker	Accepts only SAVA-29 R-ch speaker with supplied exclusive speaker cord

Tone control

Front/Center	Bass: ±10 dB at 100 Hz Treble: ±10 dB at 10 kHz

Speaker section

Type

Front speaker

Center (internal):	Bass reflex type
Front:	Bass reflex type
Sub woofer:	SAW type

Center speaker (external): Bass reflex type

Rear speaker: Bass reflex type

Speaker unit

Front speaker

Center tweeter (internal): 5cm (2 inches) cone type ×2

Front full-range/Center woofer: 10cm (4 inches) cone type ×2

Sub woofer: 13cm (5 1/8 inches) cone type ×2

Center speaker (external): 8cm (3 1/4 inches) cone type ×2

Rear speaker: 8cm (3 1/4 inches) cone type ×2

General

Power requirement

U.S.A. and Canada:	120 V AC, 60 Hz
Other models:	230 V AC, 50/60 Hz

Power consumption

U.S.A.:	90 W
Canada:	100 W
Other models:	110 W

Dimensions

Front speaker:	Approx. 270 × 1,045 × 370 mm (10 3/4 × 41 1/4 × 14 5/8 inches) (w/h/d, including speaker base)
Center speaker:	Approx. 280 × 110 × 140 mm (11 1/8 × 4 3/8 × 5 5/8 inches) (w/h/d, including grille net)
Rear speaker:	Approx. 110 × 160 × 140 mm (4 3/8 × 6 3/8 × 5 1/2 inches) (w/h/d, including grille net)

— Continued on next page —

HOME THEATER ACTIVE SPEAKER SYSTEM

MICROFILM

SONY®

Mass
Front speaker(L): 17.5 kg (38 lb 9 oz)
Front speaker(R): 14 kg (30 lb 14 oz)
Center speaker: 2 kg (4 lb 7 oz)
Rear speaker (L, R):750 g (1 lb 10 oz) each

Supplied accessories
External center speaker SS-CN15VA (1)
Rear speaker SS-SR171 (2)
Front L/R speaker connecting cord, 3.5 m (1)
Center speaker connecting cord, 2.5 m (1)
Rear speaker connecting cord, 10 m (2)
Audio connecting cord, 1.5 m (1)
Remote commander (remote) RM-J59 (1)
Sony size-AA (R6) batteries (2)
Speaker bases (2)
Wood screws (8)
Foot pads (4)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

TEST MODE ····· 3

1. GENERAL ····· 4

2. DISASSEMBLY
2-1. Removal Amplifier Block ····· 5

3. DIAGRAMS
3-1. Circuit Boards Location ····· 6
3-2. Schematic Diagram —Dolby Section — ····· 7
3-3. Printed Wiring Board —Dolby Section — ····· 9
3-4. Schematic Diagram —Display Section — ····· 11
3-5. Printed Wiring Board —Display Section — ····· 13
3-6. Schematic Diagram —Power Section — ····· 15
3-7. Printed Wiring Board —Power Section — ····· 17
3-8. Schematic Diagram —Power Transformer Section — ···· 19
3-9. Printed Wiring Board —Power Transformer Section — ·· 21
3-10. Printed Wiring Board —Main Section — ····· 23
3-11. Schematic Diagram—Main Section (1/2) — ····· 25
3-12. Schematic Diagram —Main Section (2/2) — ····· 27
3-13. IC Pin Function ····· 29
3-14. IC Block Diagrams ····· 30

4. EXPLODED VIEWS
4-1. System (L) Assy ····· 32
4-2. System (R) Assy ····· 33
4-3. Amplifier Section ····· 34
4-4. Rear Speaker Section ····· 35
4-5. Center Speaker Section ····· 36

5. ELECTRICAL PARTS LIST ····· 37

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

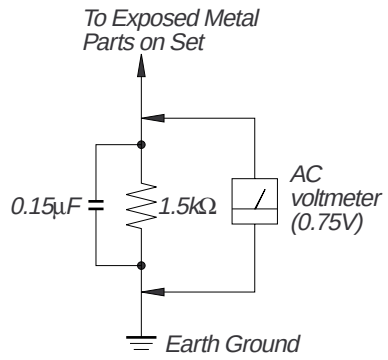


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

TEST MODE

MODE ALL FLUORESCENT INDICATOR TUBES LIGHT

When the AC plug is inserted to the power outlet with pressing the MASTER VOL + button and S.WOOFER button displayed model name, after the all fluorescent indicator tubes light.

KEY CHECK MODE

1. Pull out the AC plug from the power outlet and turn the power OFF.
2. Connect the lead wire to TP3 and TP4 on the KEY board.
3. Insert the AC plug to the power outlet and set to STANDBY mode.
4. Let the lead wire short TP3 and TP4.
5. Fluorescent indicator tube displayed “KEY CHK 29” , and enter the key check mode.
6. Pressing any buttons, the number of button will be displayed on the fluorescent indicator tube.
7. After all buttons are pressed, it will be in the STANDBY mode.

Button	Button Number	LED Color
I / ⏻	1	Red
MASTER VOL –	2	Green
MASTER VOL +	3	Red
INPUT	4	Green
SURROUND	5	Red
CENTER MODE	6	Green
S.WOOFER	7	Red

Note:
1. The LED (D505)lights while pressing each button.
   The LED lights in red when even number of buttons are pressed, and it lights in green when odd number of buttons are pressed.
2. The LED lights even when the pressed button is pressed again.

AMP CHECK MODE

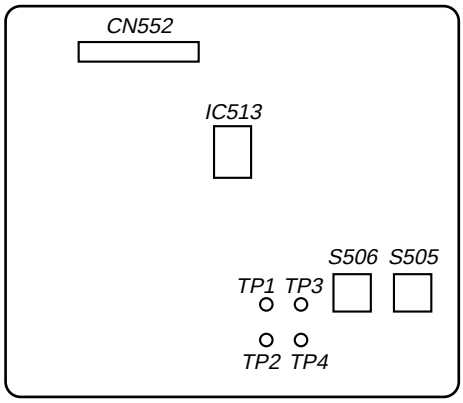
1. Pull out the AC plug from the power outlet and turn the power OFF.
2. Connect the lead wire to TP1 and TP2 on the KEY board.
3. Insert the AC plug to the power outlet and set to STANDBY mode.
4. Let the lead wire connected TP1 and TP2.
5. Fluorescent indicator tube displayed “AMP CHK 29” or “AMP CHK 59”, and enter the amp check mode.
6. The chek step advances in order as TP1 and TP2 are shorted.
7. To exit the test mode, disconnect the AC plug from power outlet.

	STEP		INPUT	VOL	SW MODE	SUR MODE	BASS	TREBLE
	0	AMP CHK 29 or 59	1	MIN	1	PRO LOGIC	0	0
	1	AMP CHK 1	1	MAX	OFF	OFF	0	0
	2	AMP CHK 2	1	MAX	OFF	OFF	–5	–5
	3	AMP CHK 3	1	MAX	OFF	OFF	+5	+5
	4	AMP CHK 4	1	MAX	OFF	PRO LOGIC	–5	–5
	5	AMP CHK 5	1	MAX	OFF	PRO LOGIC	+5	+5
	6	AMP CHK 6	1	MAX	OFF	PRO LOGIC	0	0
	7	AMP CHK 7	1	MAX	OFF	GAME	0	0
	8	AMP CHK 8	1	MIN	1	OFF	0	0
	9	AMP CHK 9	1	MAX	2	OFF	0	0
	10	AMP CHK 10	2	MAX	1	PRO LOGIC	0	0
	11	AMP CHK 11	2	MAX	1	PRO LOGIC	0	0
	12	AMP CHK 12	5.1	MAX	1	–	0	0
*	13	AMP CHK 13	2	MAX	1	PRO LOGIC	0	0

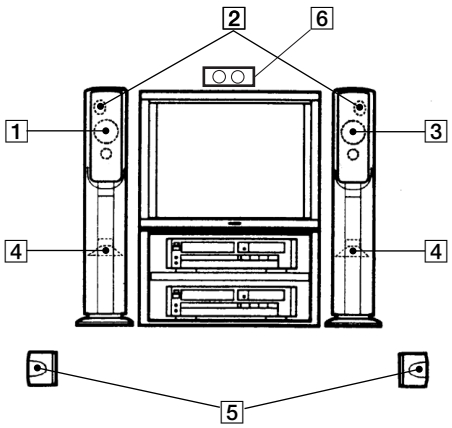
* The step 13 is the AUTO POWER ON/OFF check.

• Parts Location

[KEY BOARD] — SOLDELING side —

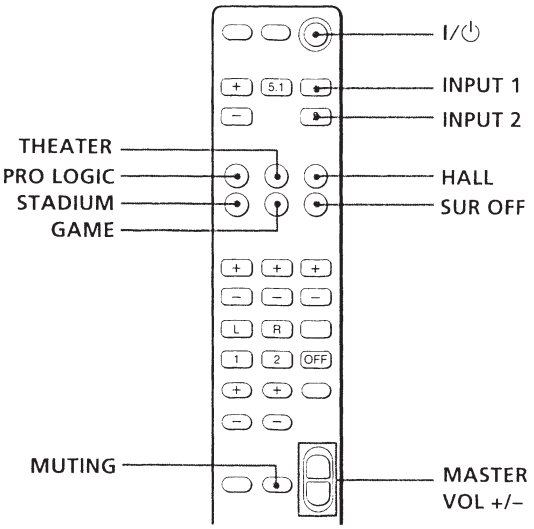


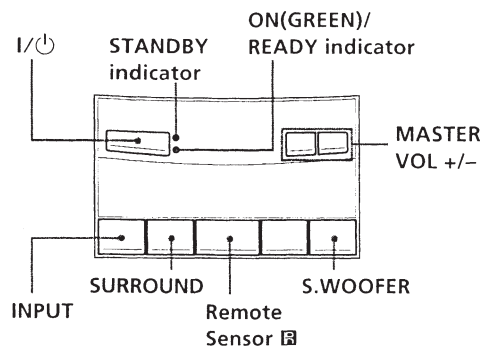
SECTION 1
GENERAL



1 LEFT CHANNEL SPEAKER/CENTER CHANNEL WOOFER
2 CENTER CHANNEL TWEETERS
3 RIGHT CHANNEL SPEAKER/CENTER CHANNEL WOOFER
4 SUPER WOOFER
5 REAR SPEAKER
6 EXTERNAL CENTER SPEAKER

REMOTE COMMANDER





FRONT SPEAKER (L-CH)

Power turns on and off automatically (Auto power on/off function)

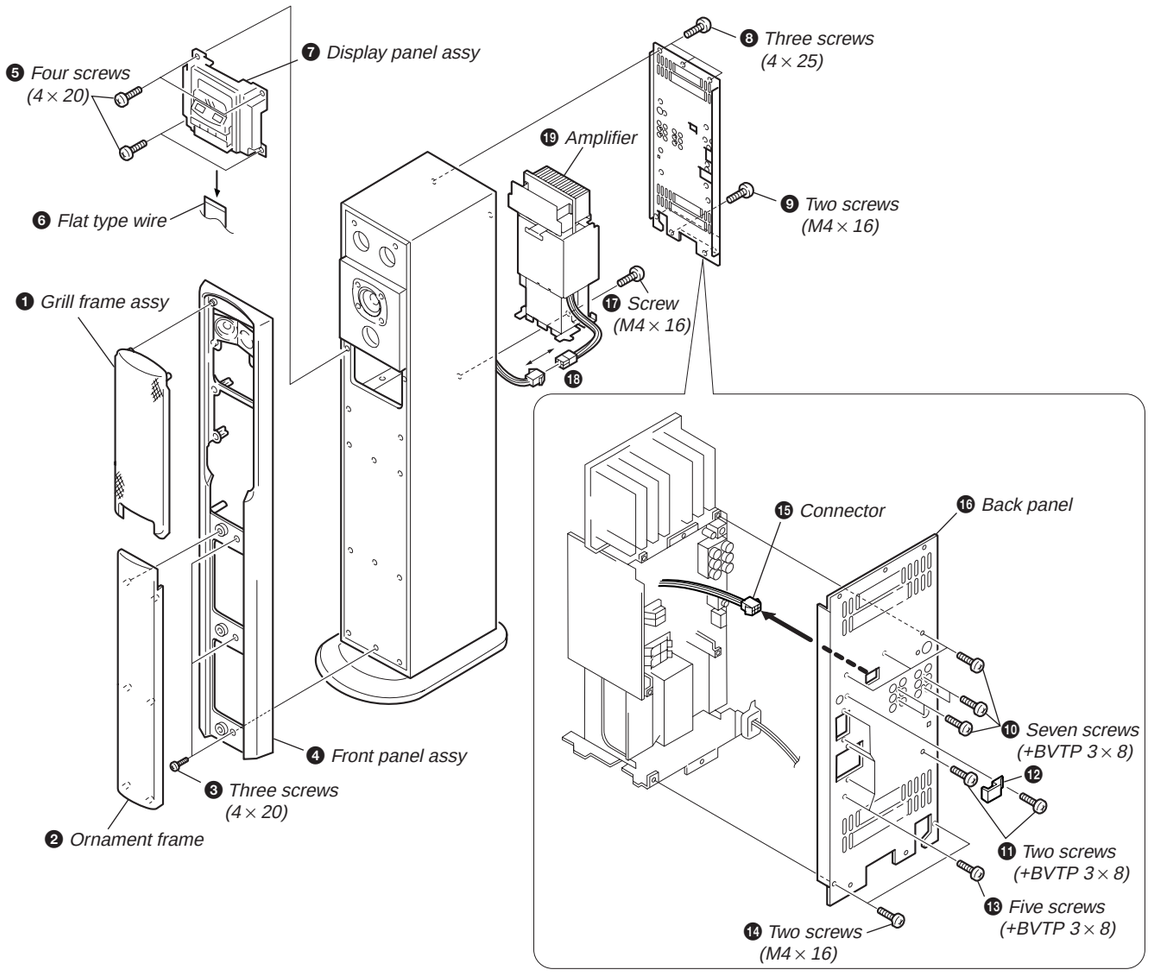
You do not need to turn the speaker system on every time you use it. Three minutes after the sound source goes off (when you turn off the TV, or the currently playing video/laserdisc ends), the speakers turn off automatically and the ON(GREEN)/READY indicator turns red.
The speakers turn on by themselves the next time you turn on the TV or start playback from the VCR.

If you press I/⏻ when the speakers are on
The speakers switch to standby mode (the ON(GREEN)/READY indicator goes off), and the auto power on/off function turns off. In this case, press I/⏻ again to turn the speakers on.

Note
The auto power on/off function does not function when 5.1-channel input is selected.

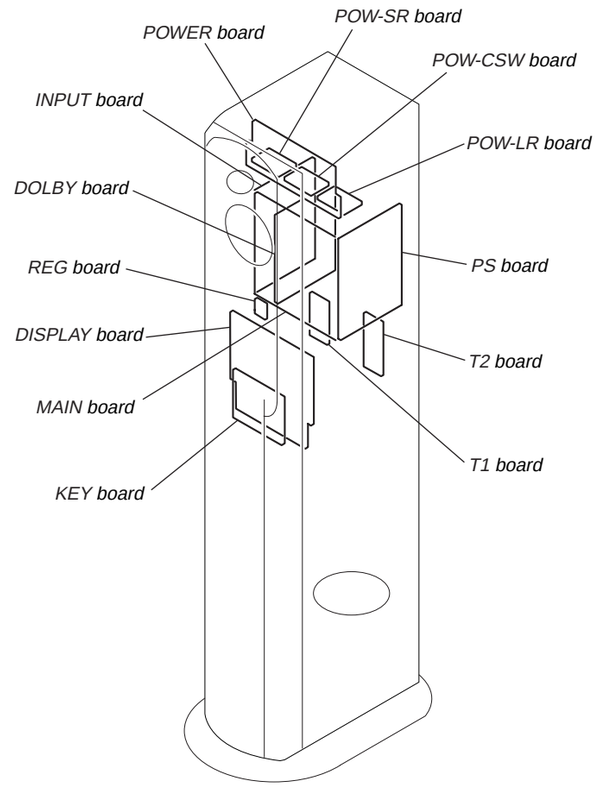
SECTION 2
DISASSEMBLY

2-1. REMOVAL AMPLIFIER BLOCK (FRONT SPEAKER: L-CH)


❺ Four screws (4 × 20)
❼ Display panel assy
❽ Three screws (4 × 25)
⓳ Amplifier
❻ Flat type wire
❾ Two screws (M4 × 16)
❶ Grill frame assy
⓱ Screw (M4 × 16)
⓲
⓯ Connector
⓰ Back panel
❿ Seven screws (+BVTP 3 × 8)
⓬
⓫ Two screws (+BVTP 3 × 8)
⓭ Five screws (+BVTP 3 × 8)
❹ Front panel assy
❸ Three screws (4 × 20)
❷ Ornament frame
⓮ Two screws (M4 × 16)

SECTION 3
DIAGRAM

3-1. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this necessary note is printed in each block.)

For schematic diagrams.
Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note:** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- B+ : B+ Line.
- B− : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
- Circled numbers refer to waveforms.

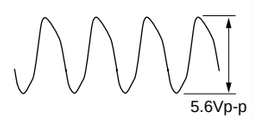
- Signal path.
  ⇨ : AUDIO
- Abbreviation
  CND : Canadian
  SP : Singapore
  MY : Malaysia

For printed wiring boards.
Note:

- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

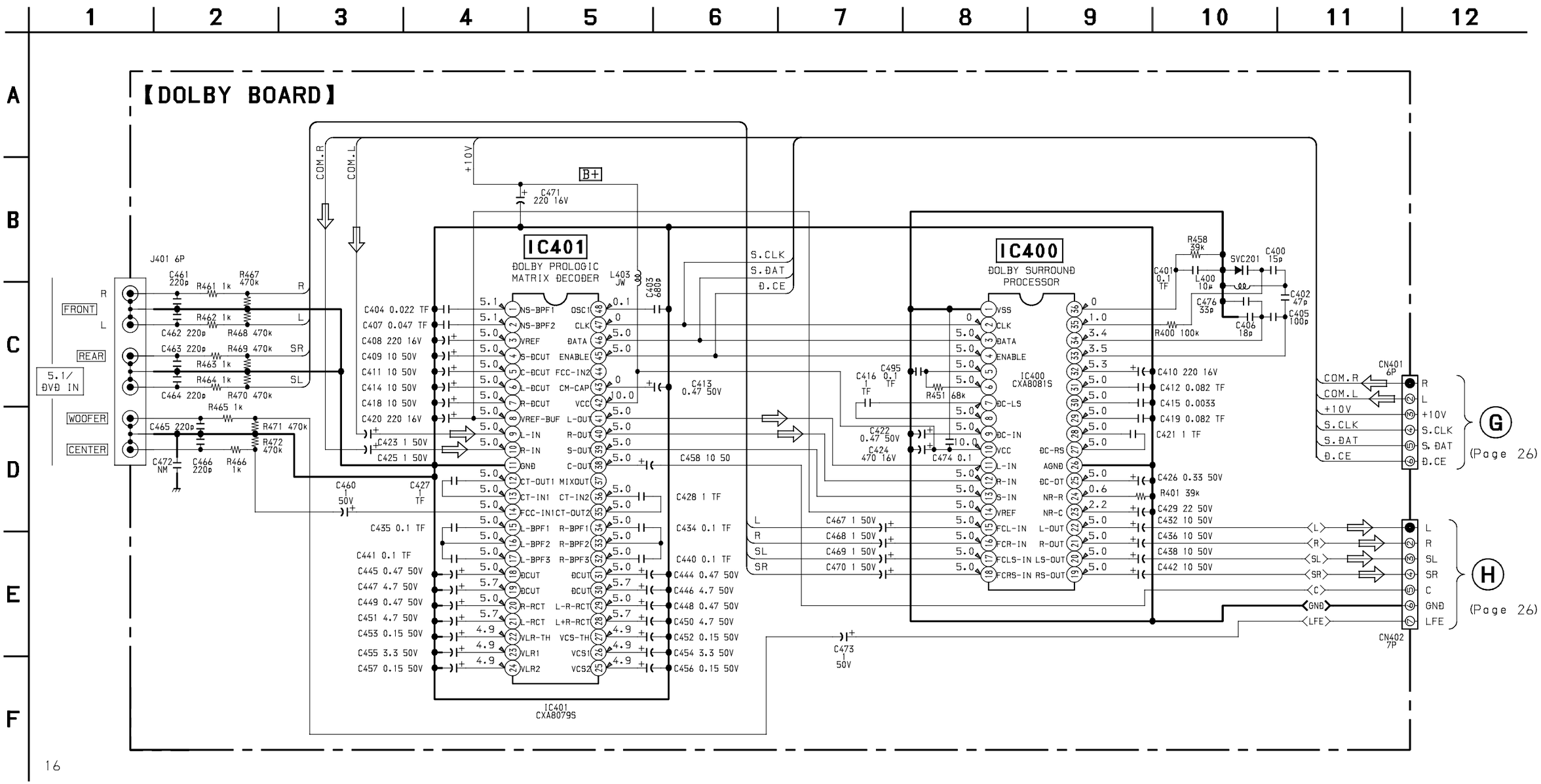
• Waveforms

② IC501㉟ (X2)



3-2. SCHEMATIC DIAGRAM — DOLBY SECTION —

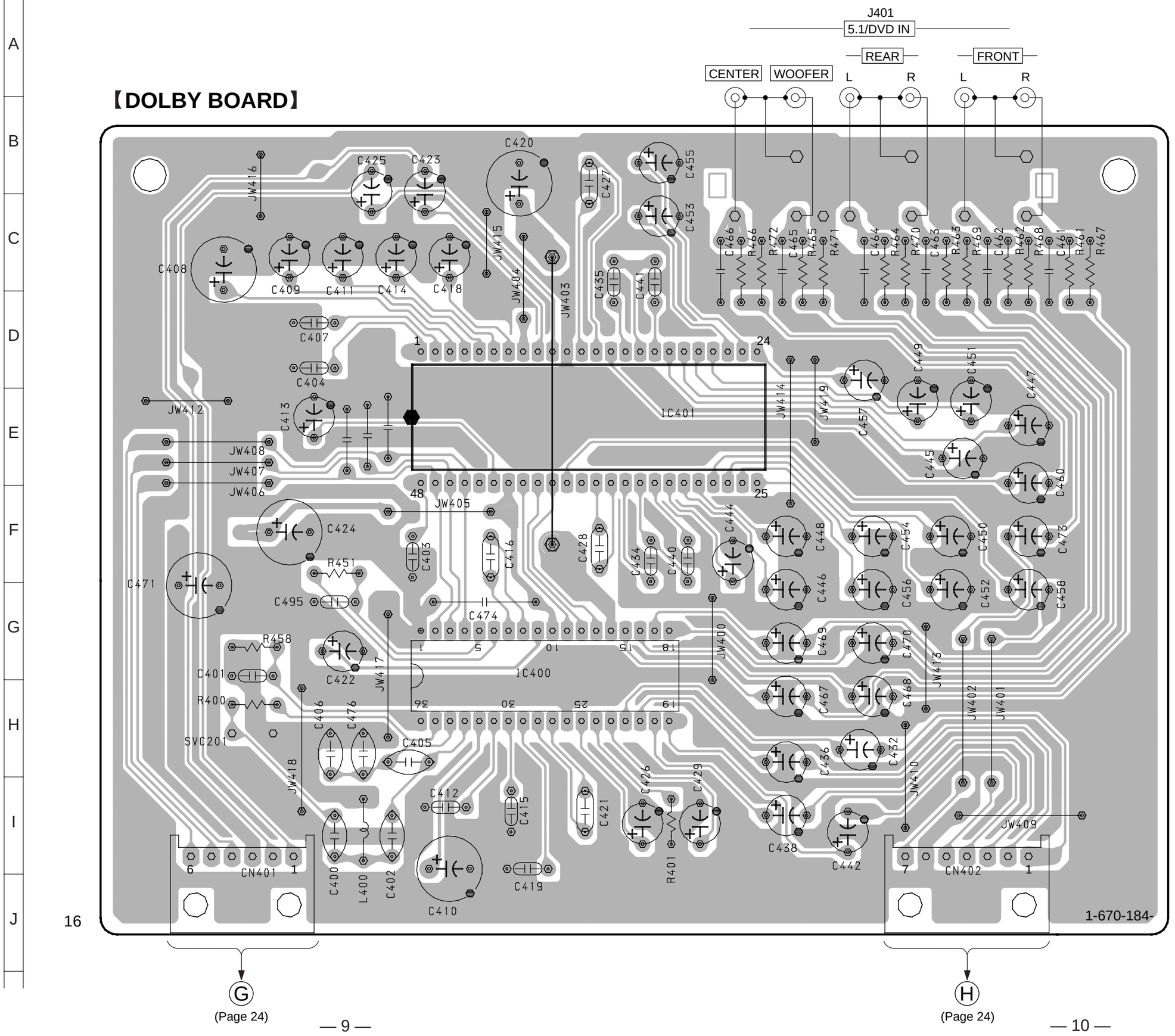
• See page 30 for IC Block Diagrams.



3-3. PRINTED WIRING BOARDS — DOLBY SECTION —

• See page 6 circuit boards location.

【DOLBY BOARD】

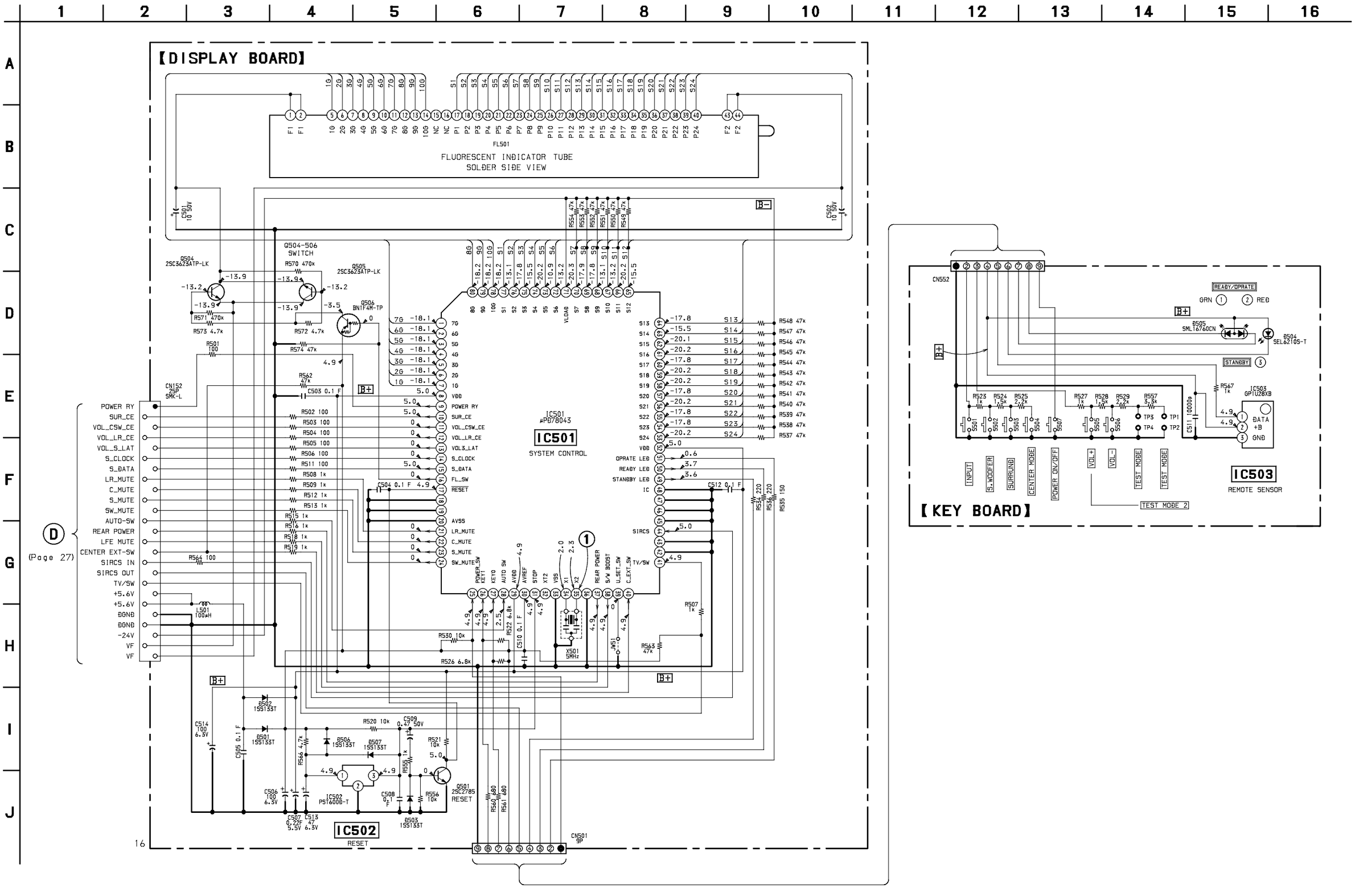


(G) (Page 24)

(H) (Page 24)

3-4. SCHEMATIC DIAGRAM — DISPLAY SECTION —

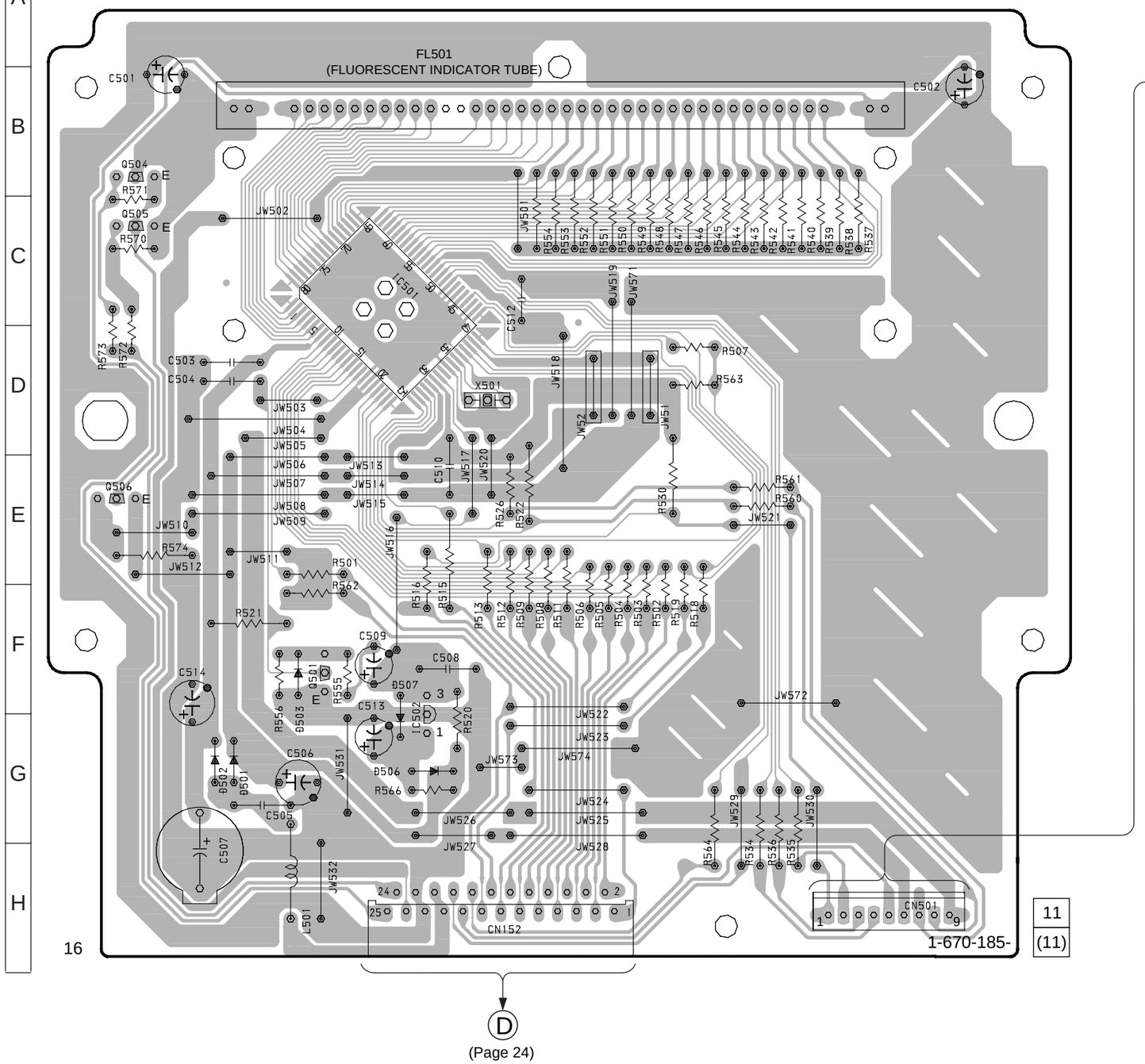
• See page 6 for Waveforms. • See page 29 for IC Pin Functions.



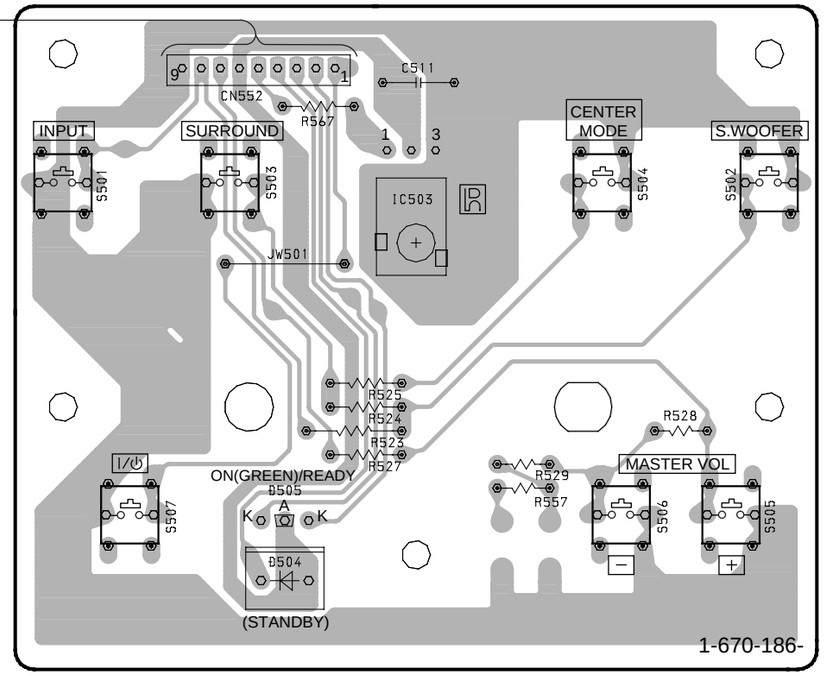
3-5. PRINTED WIRING BOARDS — DISPLAY SECTION —

• See page 6 circuit boards location.

【DISPLAY BOARD】



【KEY BOARD】

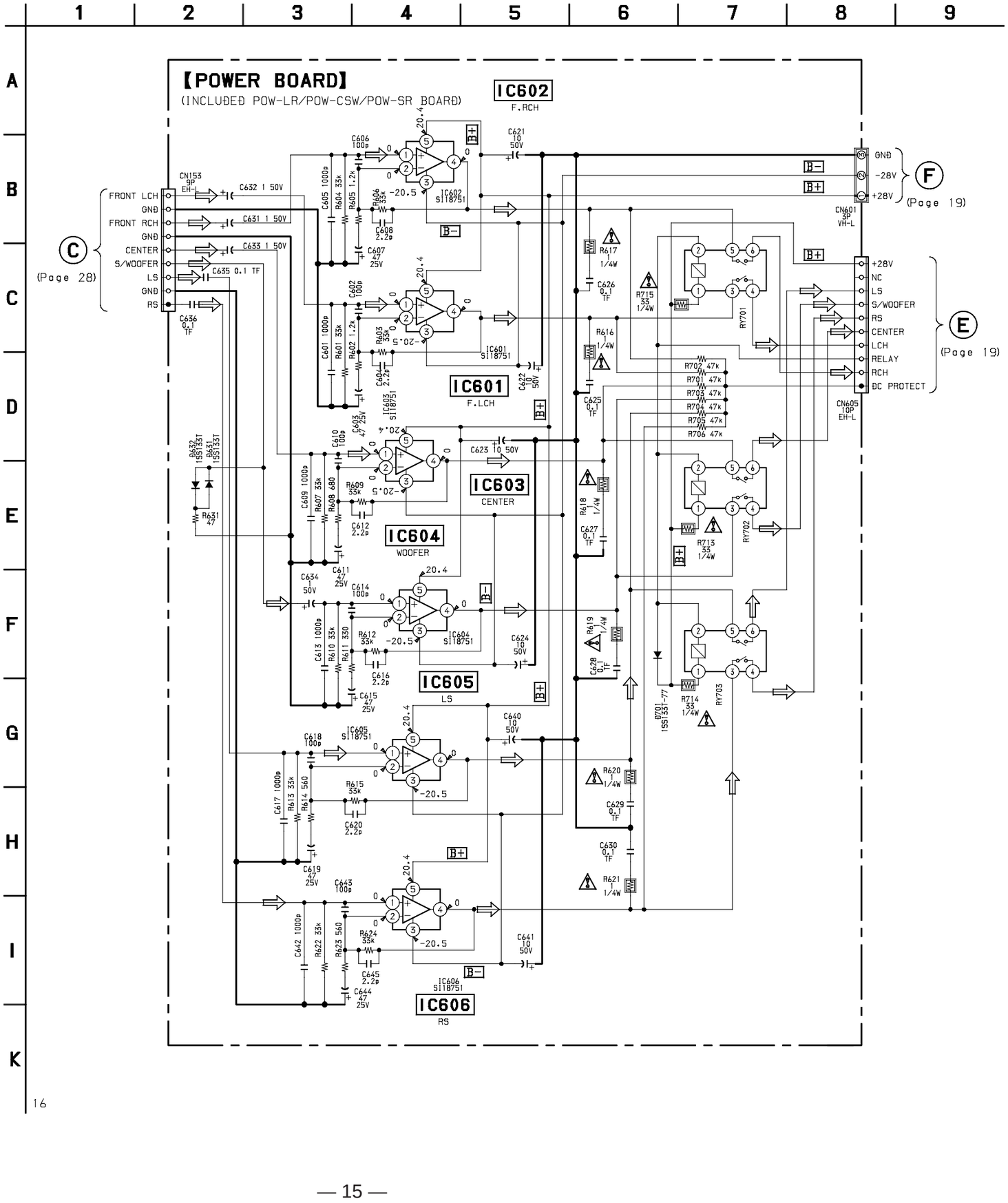


11
(11)
1-670-186-

• **Semiconductor Location**

Ref. No.	Location
D501	G-2
D502	G-2
D503	F-3
D504	E-11
D505	E-11
D506	G-4
D507	G-3
IC501	C-3
IC502	G-4
IC503	C-12
Q501	F-3
Q504	B-1
Q505	C-1
Q506	E-1

3-6. SCHEMATIC DIAGRAM — POWER SECTION —



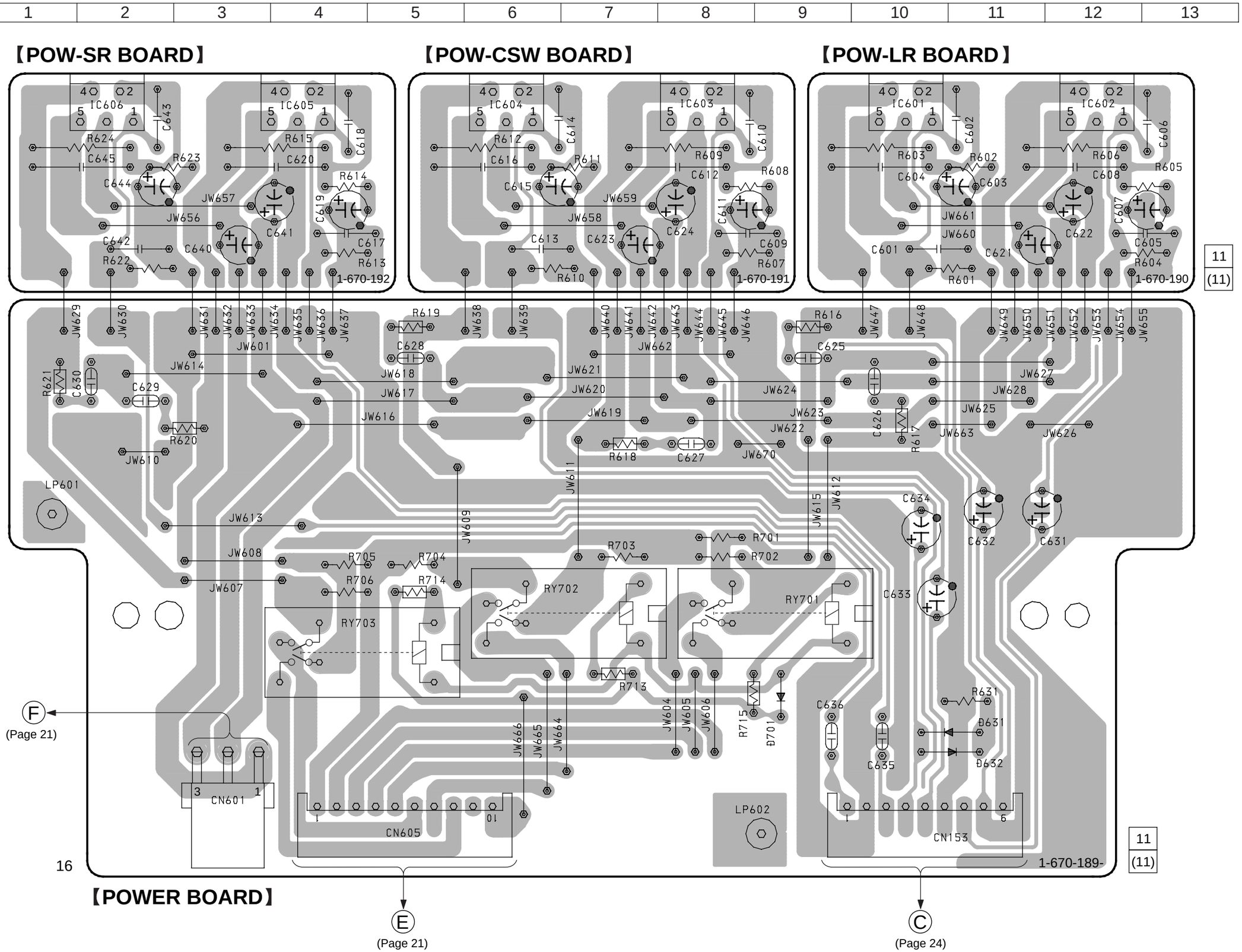
3-7. PRINTED WIRING BOARDS — POWER SECTION —

• See page 6 circuit boards location.

【POW-SR BOARD】

【POW-CSW BOARD】

【POW-LR BOARD】



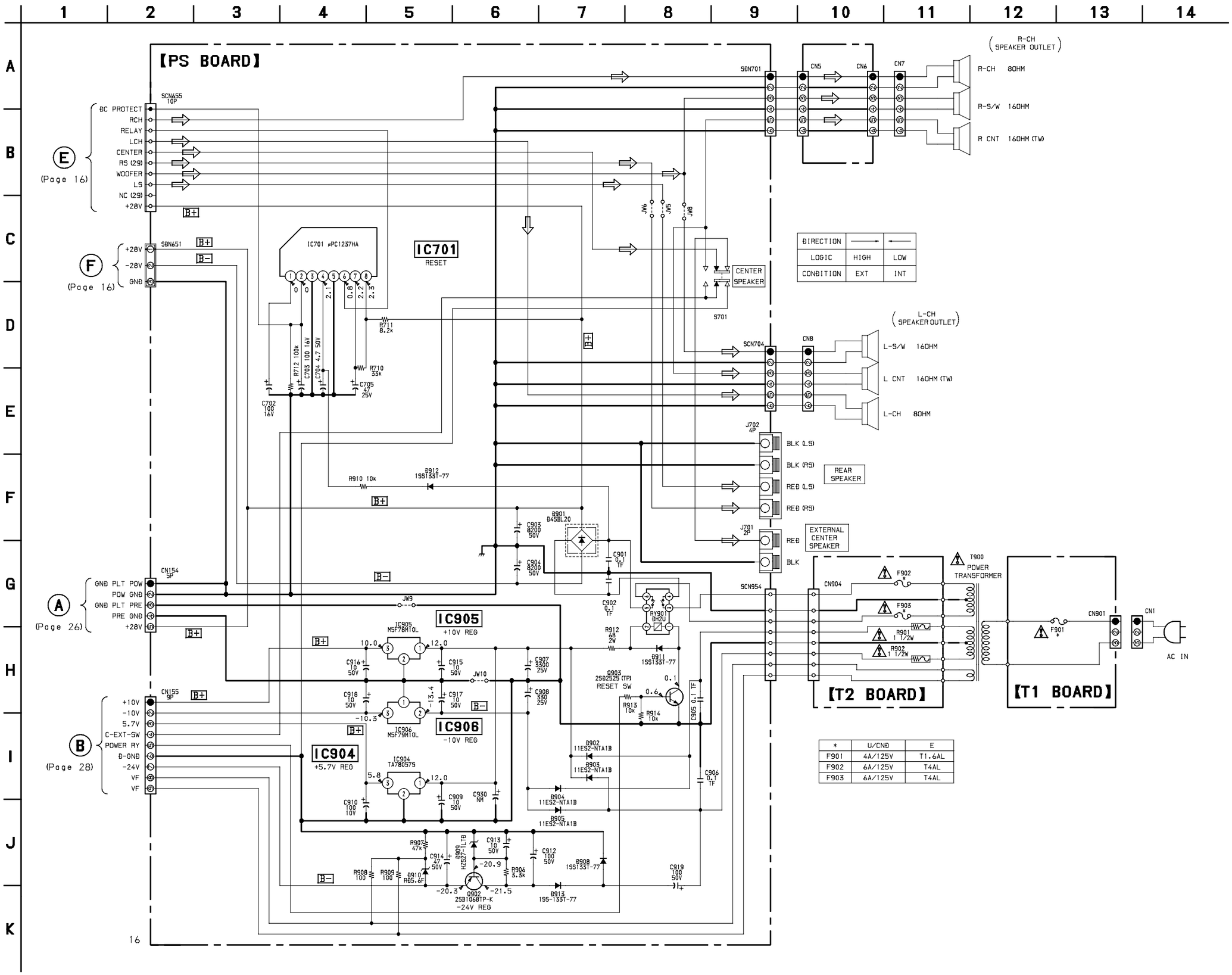
【POWER BOARD】

• **Semiconductor Location**

Ref. No.	Location
D631	H-11
D632	H-11
D701	H-9
IC601	A-10
IC602	A-12
IC603	A-8
IC604	A-6
IC605	A-4
IC606	A-2

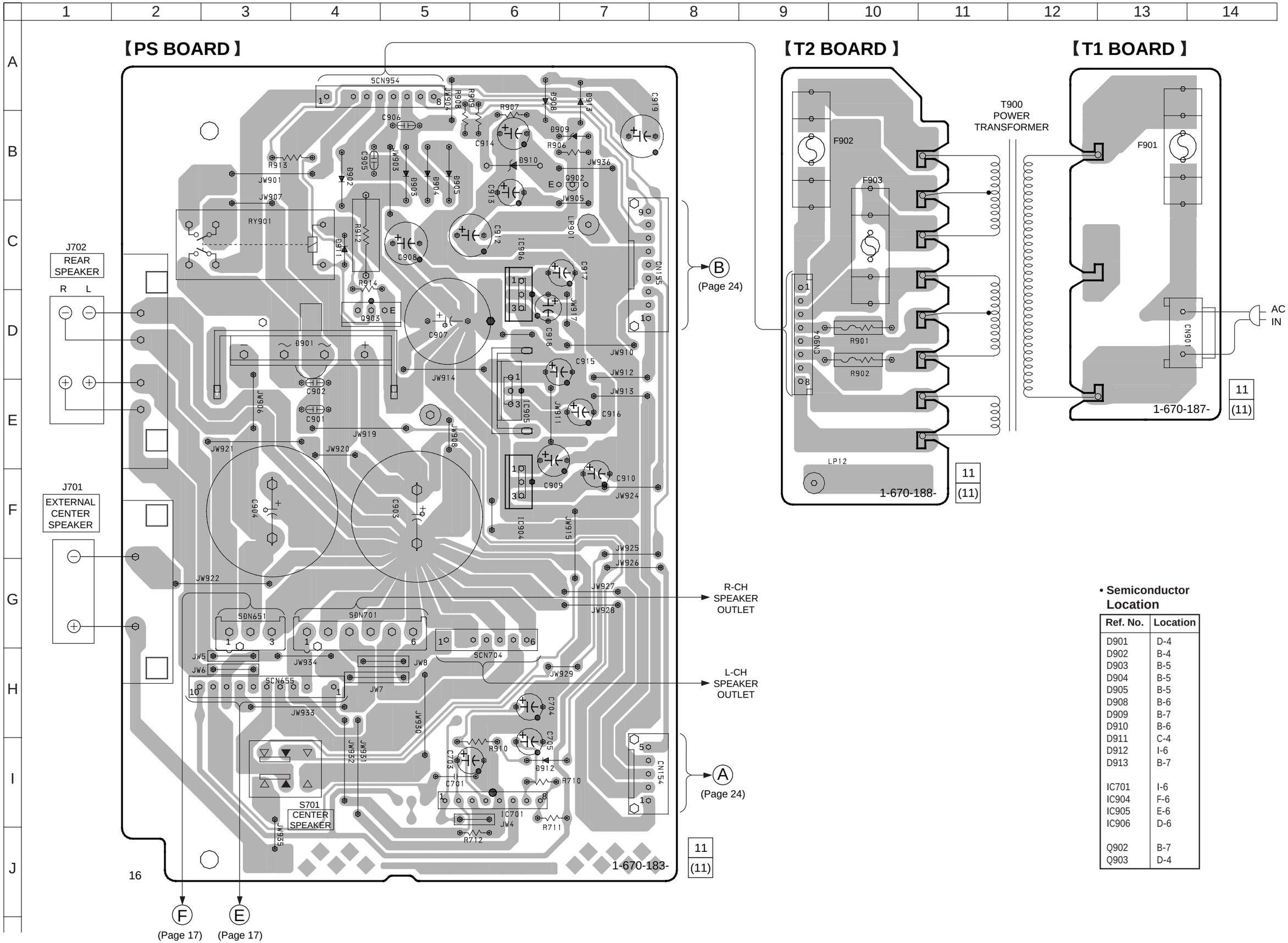
3-8. SCHEMATIC DIAGRAM — POWER TRANSFORMER SECTION —

• See page 30 for IC Block Diagrams.



3-9. PRINTED WIRING BOARDS — POWER TRANSFORMER SECTION —

• See page 6 circuit boards location.



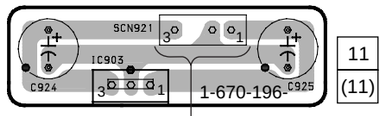
- **Semiconductor Location**

Ref. No.	Location
D901	D-4
D902	B-4
D903	B-5
D904	B-5
D905	B-5
D908	B-6
D909	B-7
D910	B-6
D911	C-4
D912	I-6
D913	B-7
IC701	I-6
IC904	F-6
IC905	E-6
IC906	D-6
Q902	B-7
Q903	D-4

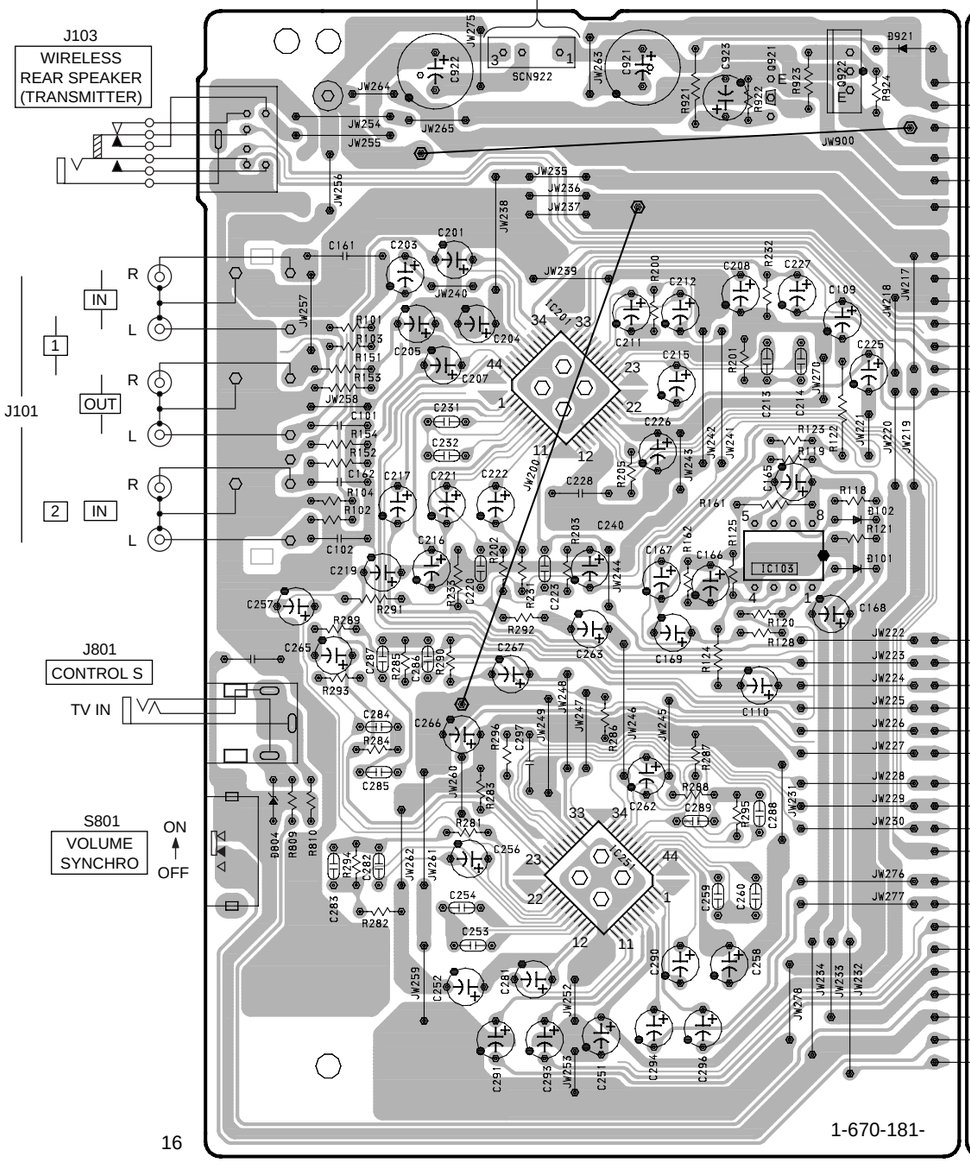
3-10. PRINTED WIRING BOARDS — MAIN SECTION —

• See page 6 circuit boards location.

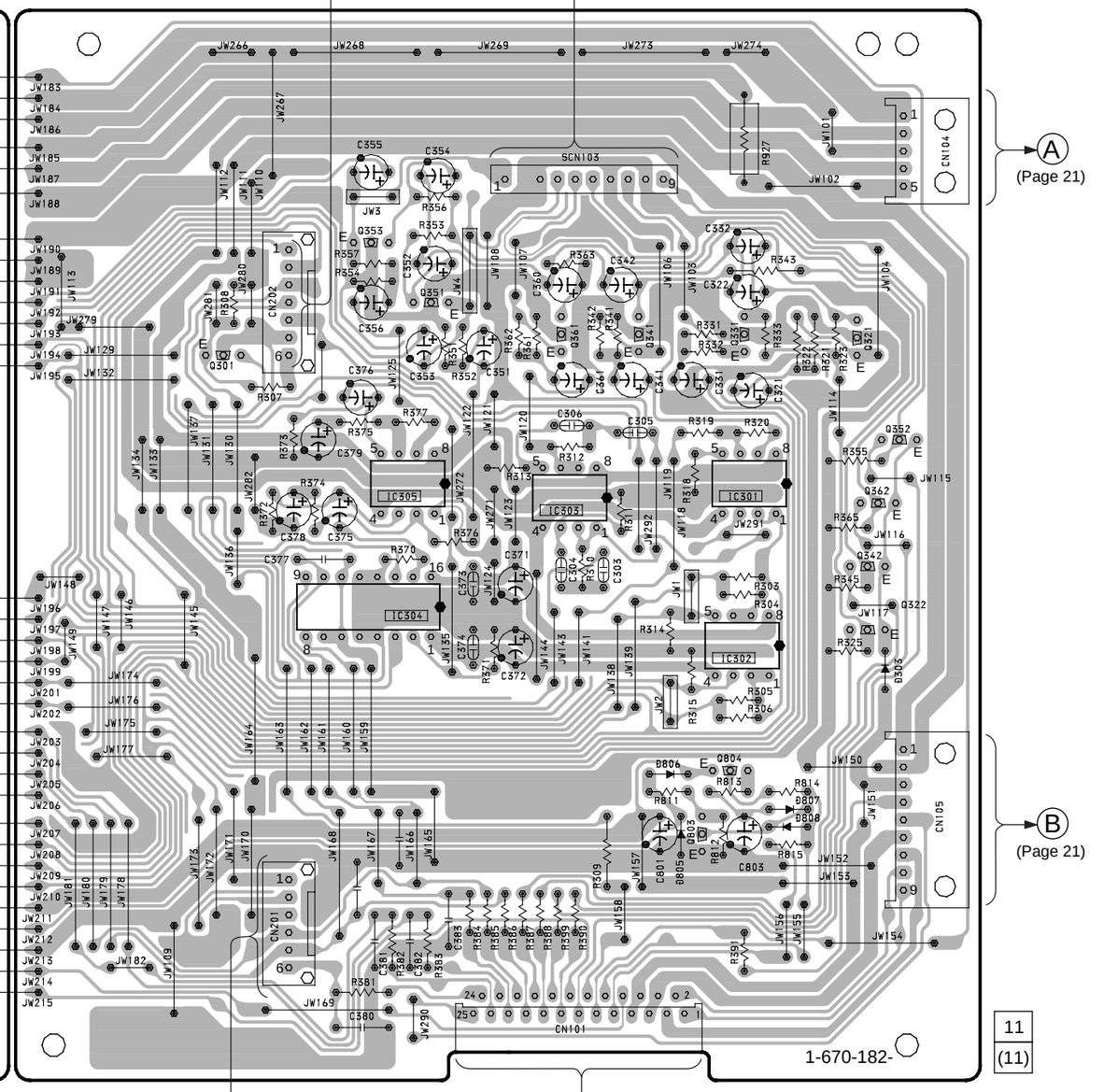
【REG BOARD】



【INPUT BOARD】



【MAIN BOARD】

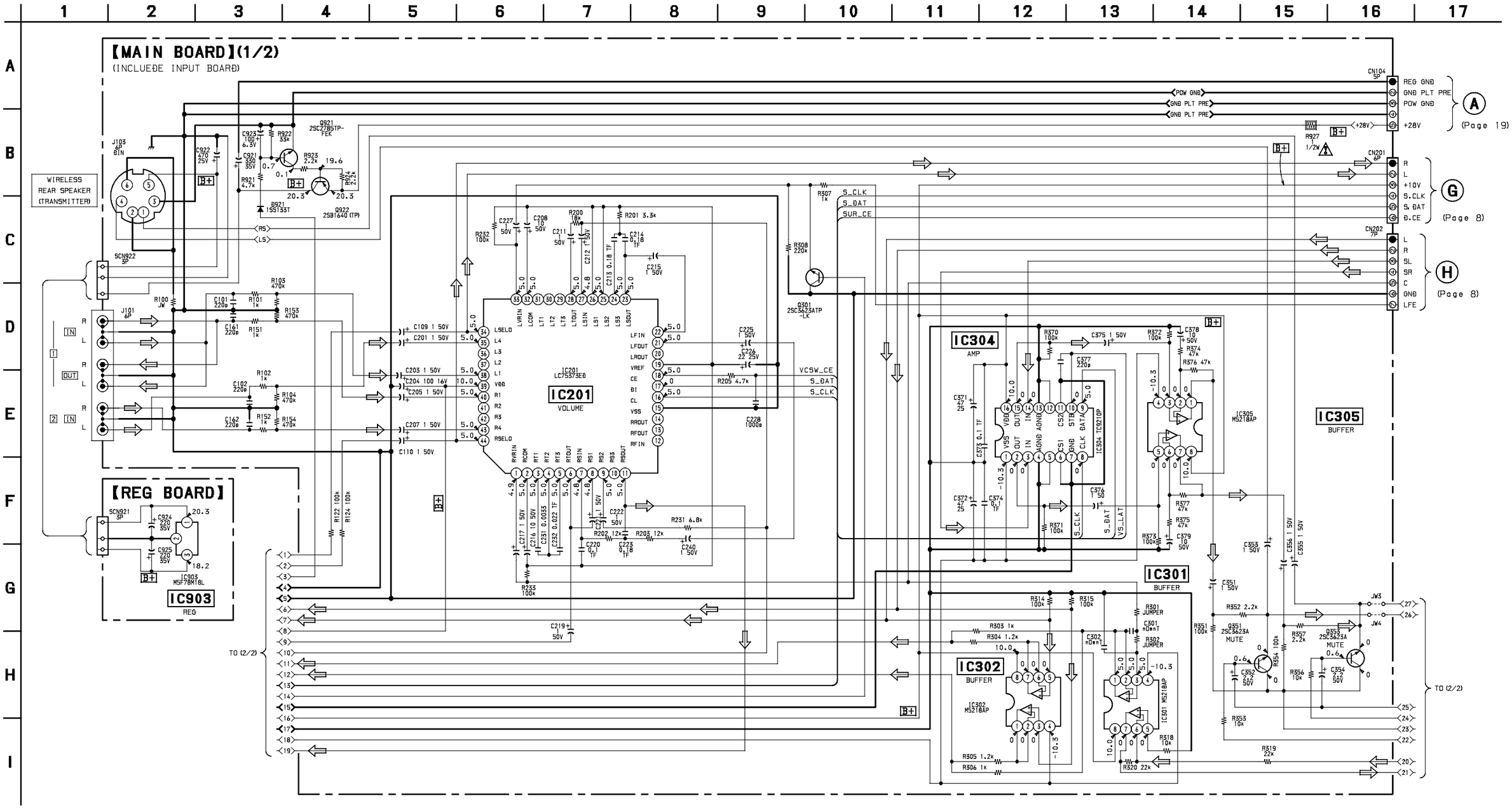


• **Semiconductor Location**

Ref. No.	Location
D101	E-6
D102	E-6
D303	F-12
D804	G-2
D805	G-11
D806	G-11
D807	G-12
D808	G-12
D921	B-6
IC103	E-5
IC201	D-4
IC251	G-4
IC301	E-11
IC302	F-11
IC303	E-10
IC304	F-9
IC305	E-9
IC903	A-4
Q301	D-8
Q321	D-12
Q322	F-12
Q331	D-11
Q341	D-11
Q342	E-12
Q351	D-9
Q352	E-12
Q353	C-9
Q361	D-10
Q362	E-12
Q803	G-11
Q804	G-11
Q921	B-5
Q922	B-6

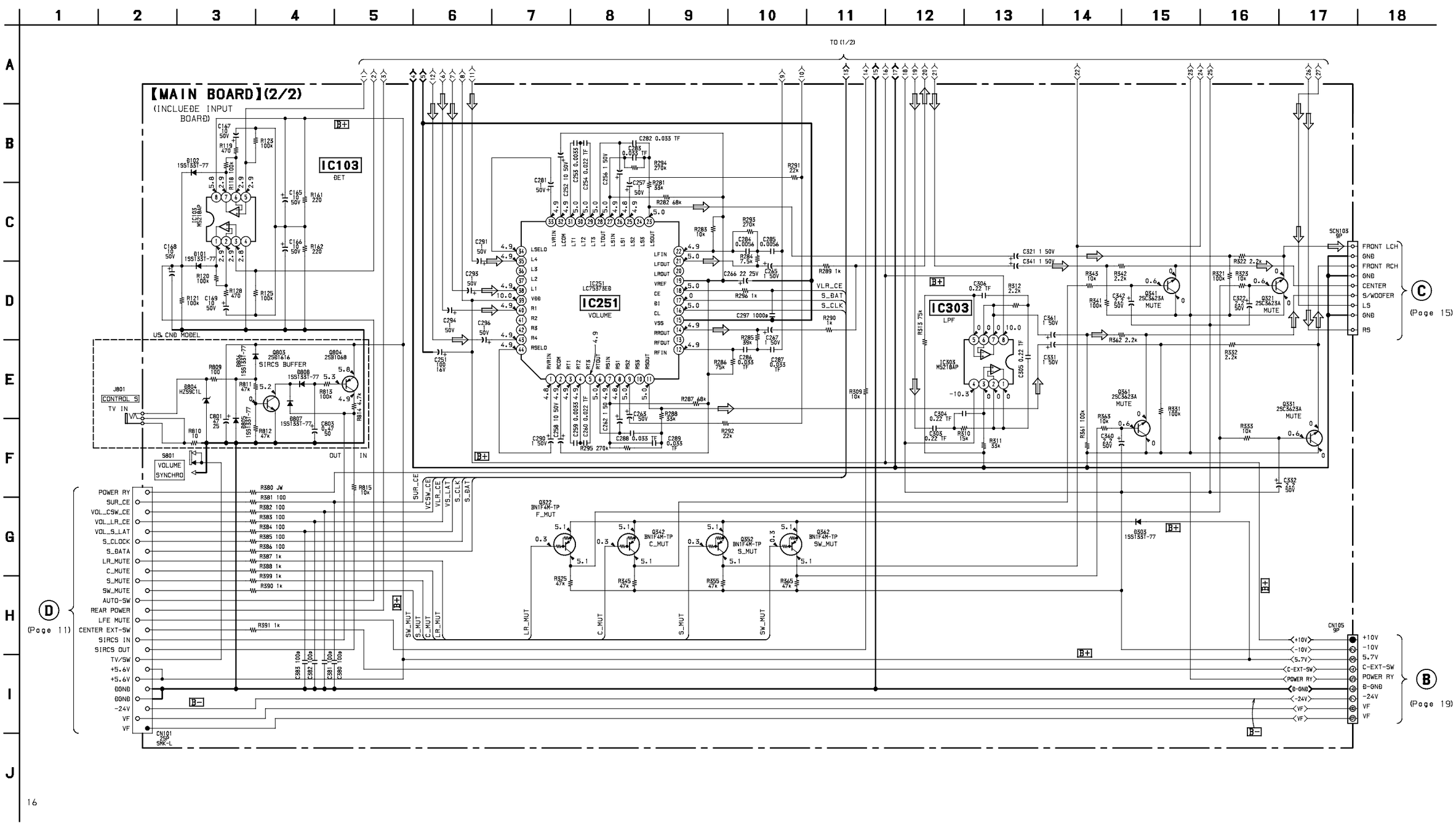
3-11. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

• See page 30 for IC Block Diagrams.



3-12. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) —

• See page 30 for IC Block Diagrams.



3-13. IC PIN FUNCTIONS

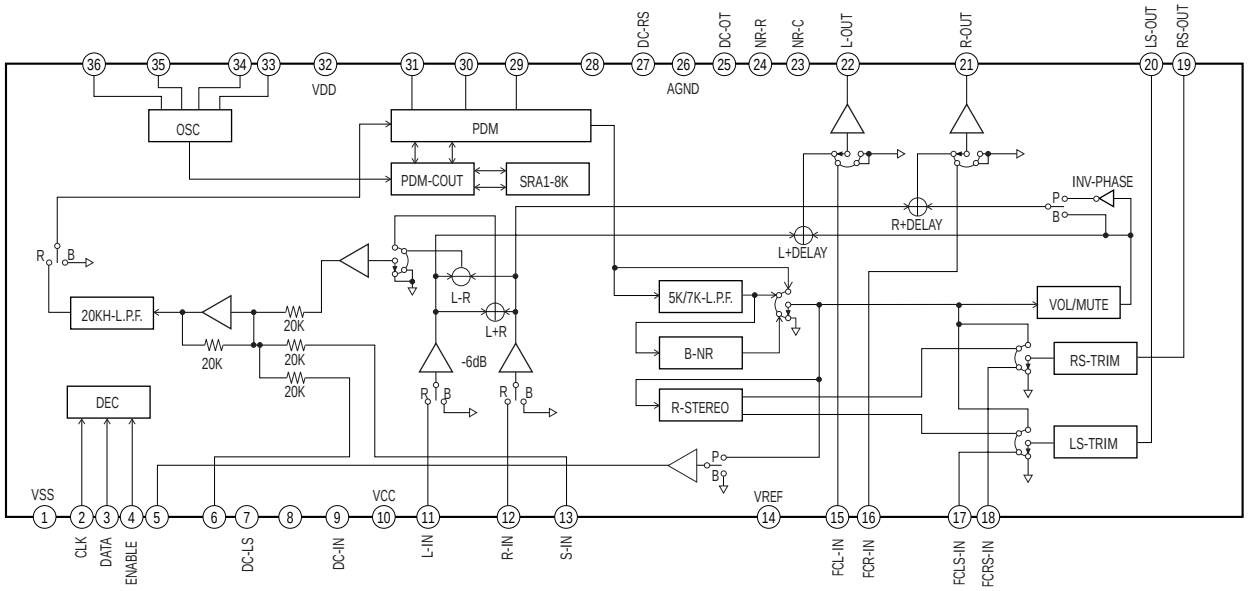
• IC501 SYSTEM CONTROL (uPD78043FGF-046-3B9) (DISPLAY BOARD)

Pin No.	Pin Name	I/O	Description
1 to7	7G to 1G	O	FL grid output signal
8	VDD	—	Power supply (+5 V)
9	POWER RY	O	Power relay control output
10	SUR CE	O	Surround IC (LA2787, LV1017) control, chip enable output
11	VOL CSW CE	O	CSW channels volume IC (LC75373) control, chip enable output
12	VOL LR CE	O	LR channels volume IC (LC75373) control, chip enable output
13	VOL3 LAT	O	Rear volume IC (TC9210) control, latch output
14	S CLOCK	O	Clock output
15	S DATA	O	Data output
16	FL SW	O	FL power supply switch
17	RESET	I	Reset input
18	—	—	Not used (Connected to ground)
19	—	—	Not used (Connected to ground)
20	AVSS	—	A/D converter ground (Connected to ground)
21	LR MUTE	O	LR mute
22	C MUTE	O	Center mute
23	S MUTE	O	Rear mute
24	SW MUTE	O	Sub woofer mute
25	POWER SW	I	POWER key detection
26	KEY 1	I	Key input 1
27	KEY 0	I	Key input 0
28	AUTO SW	I	Auto power signal detection input
29	AVDD	—	A/D converter analog power supply (+5 V)
30	AVREF	—	A/D converter reference voltage
31	STOP	I	Stop detection
32	XT2	—	Not used (Not connected)
33	VSS	—	Ground (Connected to ground)
34	X1	—	External crystal oscillator is connected to this terminal
35	X2	—	External crystal oscillator is connected to this terminal
36	—	—	Not used (Not connected)
37	REAR POWER	O	Wireless rear power transmission control output
38	S/W BOOST	O	Sub woofer volume adjustment control output
39	U SET SW	I	SAVA-29/59 discrimination input
40	C EXT SW	I	External/internal center speaker selection control input
41	TV/SW	I	Control S (TV) select control input
42	—	—	Not used (Connected to ground)
43	—	—	Not used (Connected to ground)
44	SIRCS	I	SIRCS data input
45	—	—	Not used (Connected to ground)
46	—	—	Not used (Connected to ground)
47	—	—	Not used (Connected to ground)
48	IC	—	Not used (Connected to ground)
49	STANDBY LED	O	STANDBY LED ON/OFF control output
50	READY LED	O	READY LED ON/OFF control output
51	OPERATE LED	O	OPERATE LED ON/OFF control output
52	VDD	—	Power supply (+5 V)
53 to 70	S24 to S7	O	FL segment output signal
71	VLOAD	—	FL pull down voltage (–35 V)
72 to 77	S6 to S1	O	FL segment output signal
78 to 80	10G to 8G	O	FL grid output signal

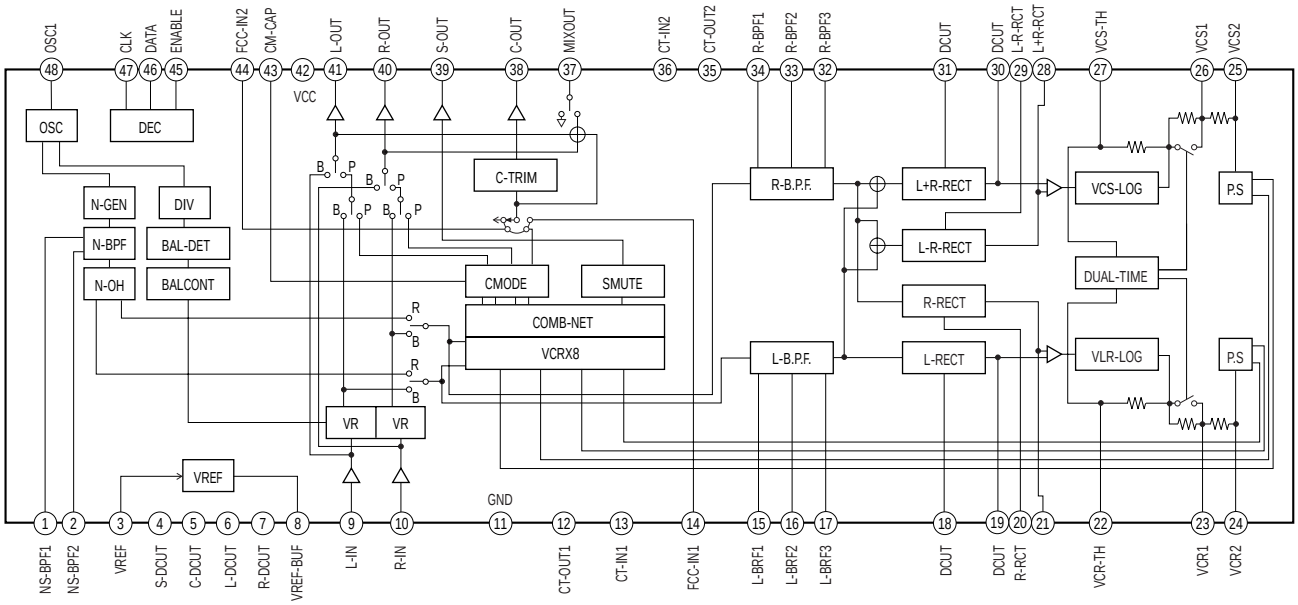
• Abbreviation
FL : Fluorescent indicator signal

3-14. IC BLOCK DIAGRAMS

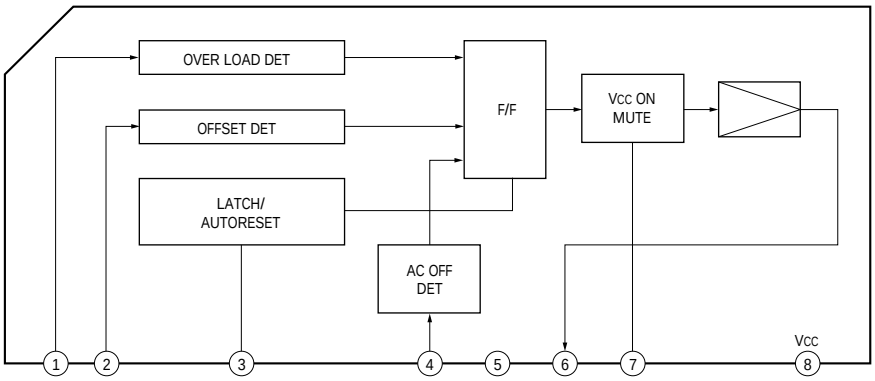
IC400 CXA8081S (DOLBY BOARD)



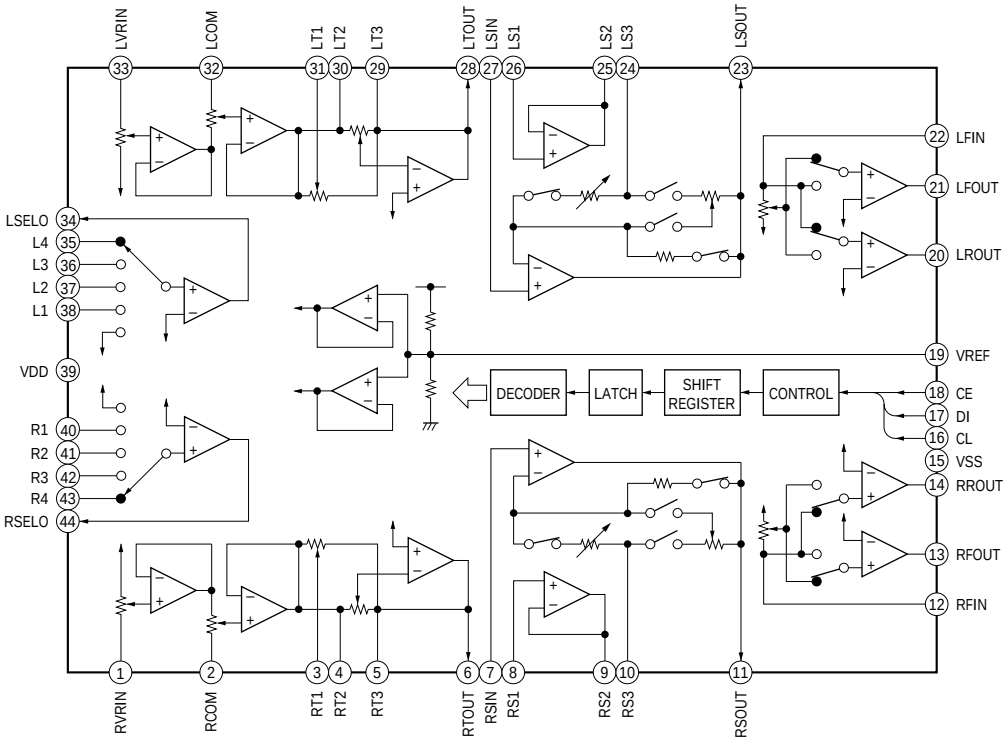
IC401 CXA8079S (DOLBY BOARD)



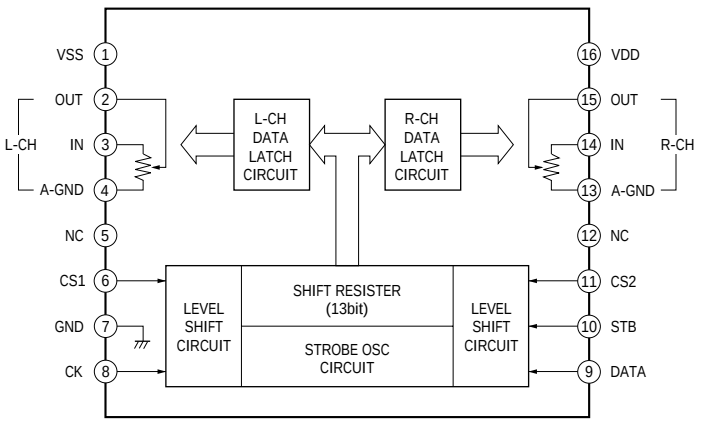
IC701 μPC1237HA (PS BOARD)



IC201, 251 LC75373ED (MAIN BOARD)



IC304 TC9210P (MAIN BOARD)



SECTION 4
EXPLODED VIEWS

NOTE:

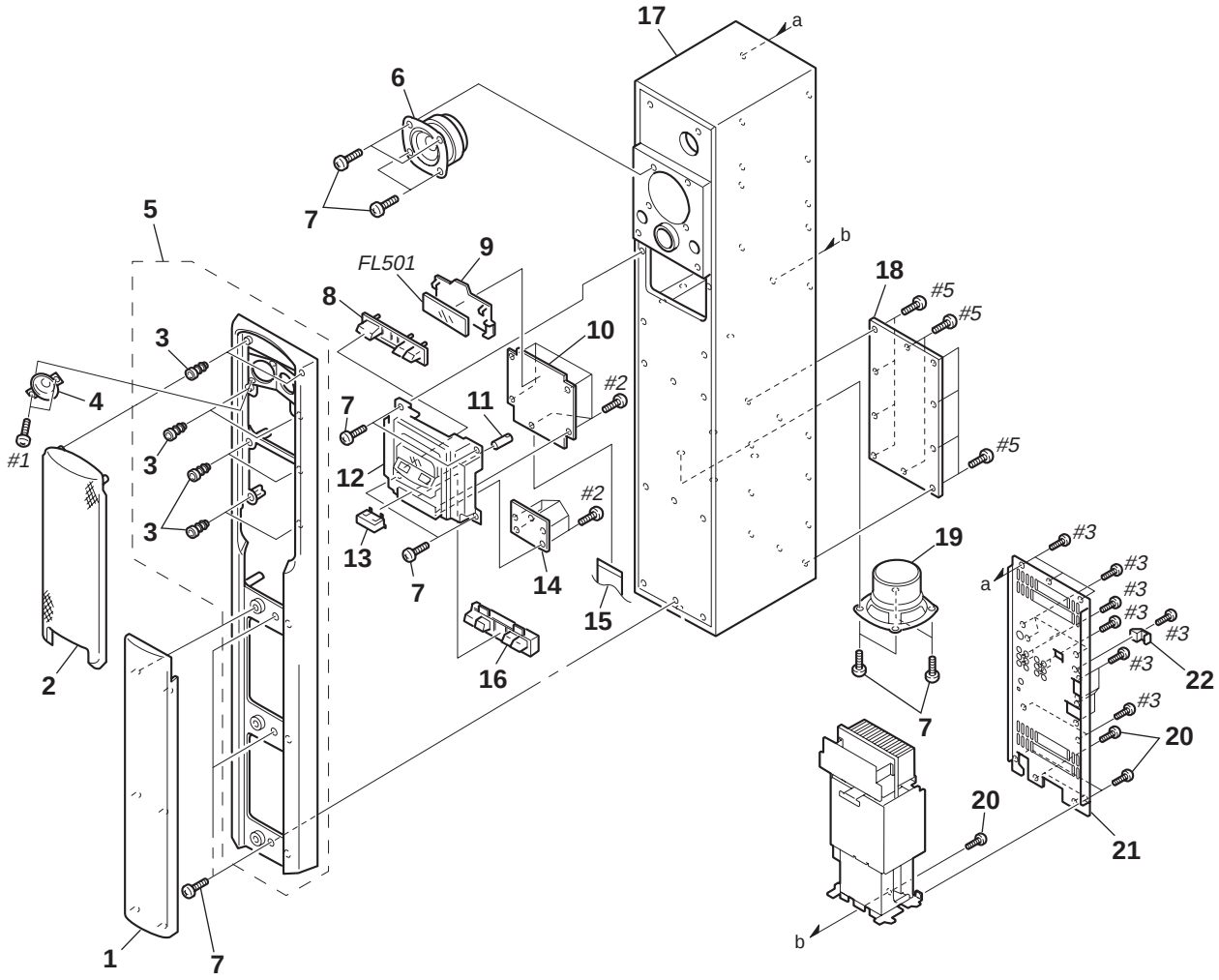
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  CND : Canadian
  SP : Singapore
  MY : Malaysia
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

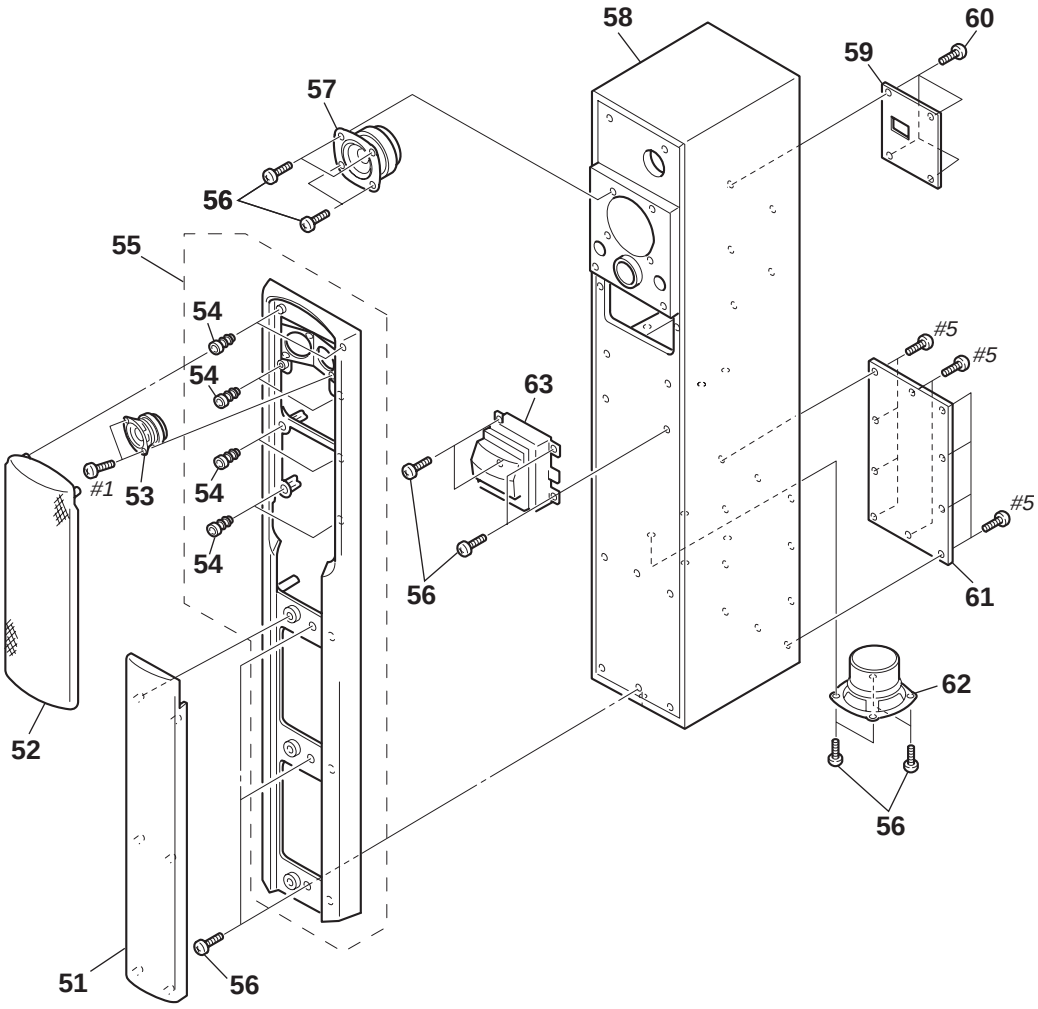
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

4-1. SYSTEM (L) ASSY



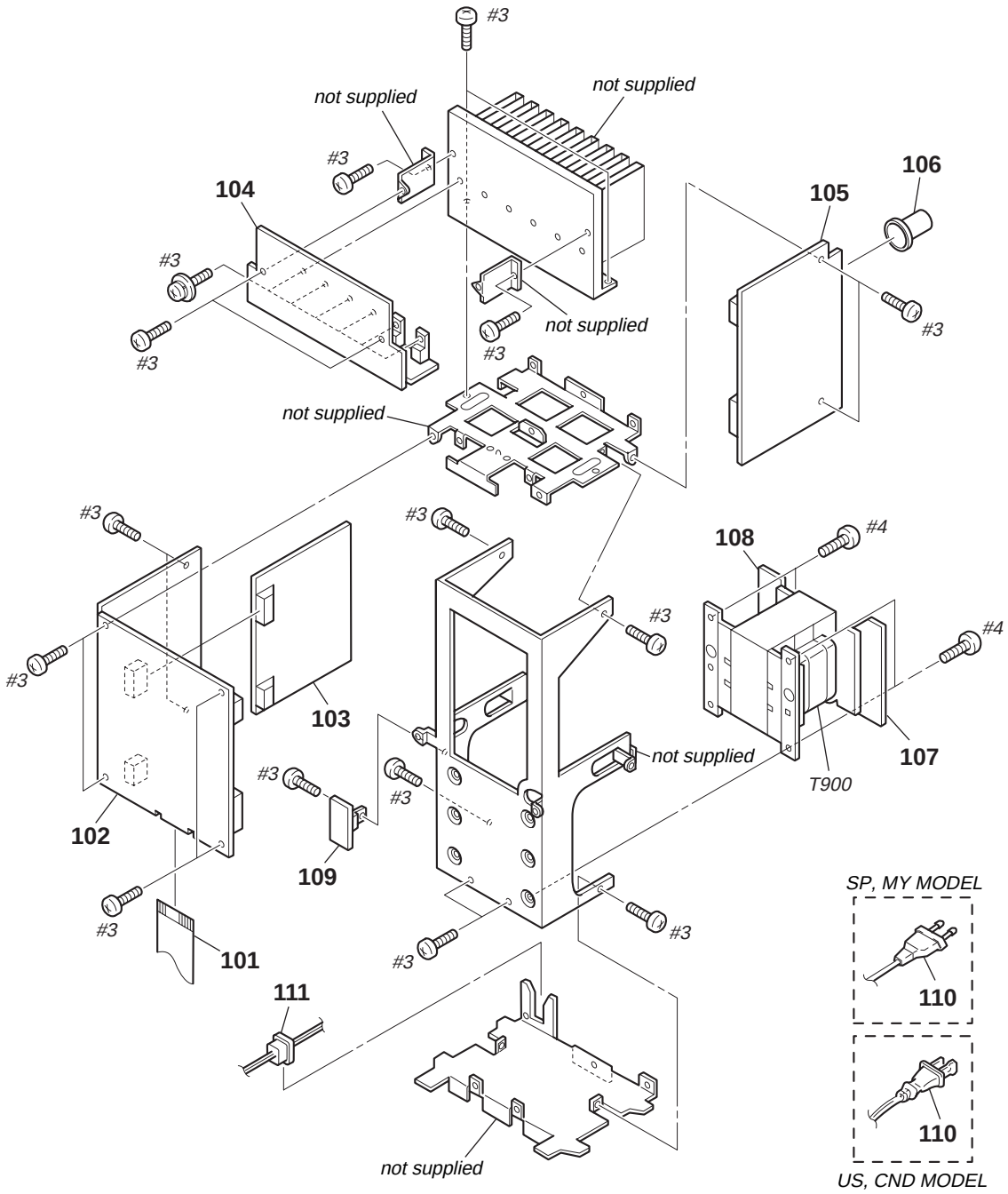
Ref. No.	Part No.	Description	Remarks
1	4-991-883-01	FRAME, ORNAMENT	
2	X-4948-622-1	FRAME (L) ASSY, GRILLE	
3	4-951-733-01	CATCHER	
4	1-505-681-11	SPEAKER (5cm)	
5	X-4948-623-1	PANEL ASSY, FRONT	
6	1-505-680-11	SPEAKER (10cm)	
7	4-914-430-11	SCREW (4 × 20), TAPPING	
8	4-991-271-01	BUTTON (A)	
* 9	4-991-276-01	HOLDER, FL TUBE	
* 10	A-4414-392-A	DISPLAY BOARD, COMPLETE	
11	4-991-284-01	REFLECTOR	
12	X-4950-407-1	PANEL ASSY, DISPLAY	
13	4-991-275-01	WINDOW (IR)	
* 14	1-670-186-11	KEY BOARD	
15	1-773-241-11	WIRE (FLAT TYPE) (25 CORE)	
16	4-991-272-01	BUTTON (B)	
* 17	A-4411-125-A	CABINET (L) ASSY, SPEAKER	
18	4-973-511-21	COVER (W)	
19	1-505-679-11	SPEAKER (13cm)	
20	4-929-125-01	SCREW (M4 × 16), TAPPING	
* 21	4-900-169-01	PANEL (L), BACK (US)	
* 21	4-900-169-11	PANEL (L), BACK (CND)	
* 21	4-900-169-21	PANEL (L), BACK (SP, MY)	
* 22	4-976-741-01	COVER, BUTTON	
FL501	1-517-673-11	INDICATOR TUBE, FLUORESCENT	

4-2. SYSTEM (R) ASSY



Ref. No.	Part No.	Description	Remarks
51	4-991-883-01	FRAME, ORNAMENT	
52	X-4948-752-1	FRAME (R) ASSY, GRILLE	
53	1-505-681-11	SPEAKER (5cm)	
54	4-951-733-01	CATCHER	
55	X-4948-623-1	PANEL ASSY, FRONT	
56	4-914-430-11	SCREW (4 × 20), TAPPING	
57	1-505-680-11	SPEAKER (10cm)	
* 58	A-4411-167-A	CABINET (R) ASSY, SPEAKER	
* 59	4-210-649-01	PANEL (R), BACK	
60	4-929-125-01	SCREW (M4 × 16), TAPPING	
61	4-973-511-21	COVER (W)	
62	1-505-679-11	SPEAKER (13cm)	
63	X-4948-709-2	PANEL (R) ASSY	

4-3. ANPLIFIER SECTION

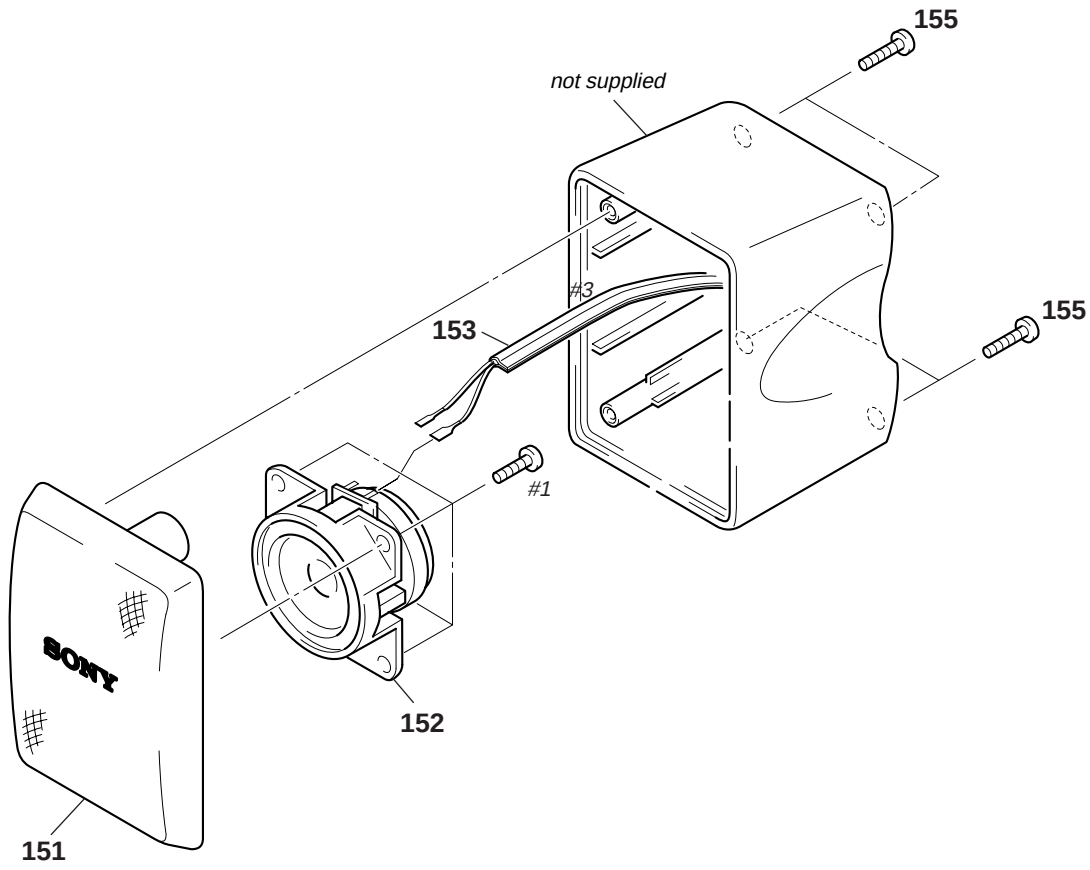


Ref. No.	Part No.	Description	Remarks
101	1-773-241-11	WIRE (FLAT TYPE) (25 CORE)	
* 102	A-4414-398-A	MAIN BOARD, COMPLETE (US, CND)	
* 102	A-4414-402-A	MAIN BOARD, COMPLETE (SP, MY)	
* 103	A-4414-396-A	DOLBY BOARD, COMPLETE	
* 104	A-4414-394-A	POWER BOARD, COMPLETE	
* 105	A-4414-395-A	PS BOARD, COMPLETE	
* 106	4-975-298-01	BUTTON (PUSH)	
* 107	1-670-188-11	T2 BOARD	

Ref. No.	Part No.	Description	Remarks
* 108	1-670-187-11	T1 BOARD	
* 109	1-670-196-11	REG BOARD	
110	1-575-042-21	CORD, POWER (US, CND)	
110	1-575-651-21	CORD, POWER (SP, MY)	
* 111	3-703-244-00	BUSHING (2104), CORD	
⚠T900	1-431-864-11	TRANSFORMER, POWER (US, CND)	
⚠T900	1-431-865-11	TRANSFORMER, POWER (SP, MY)	

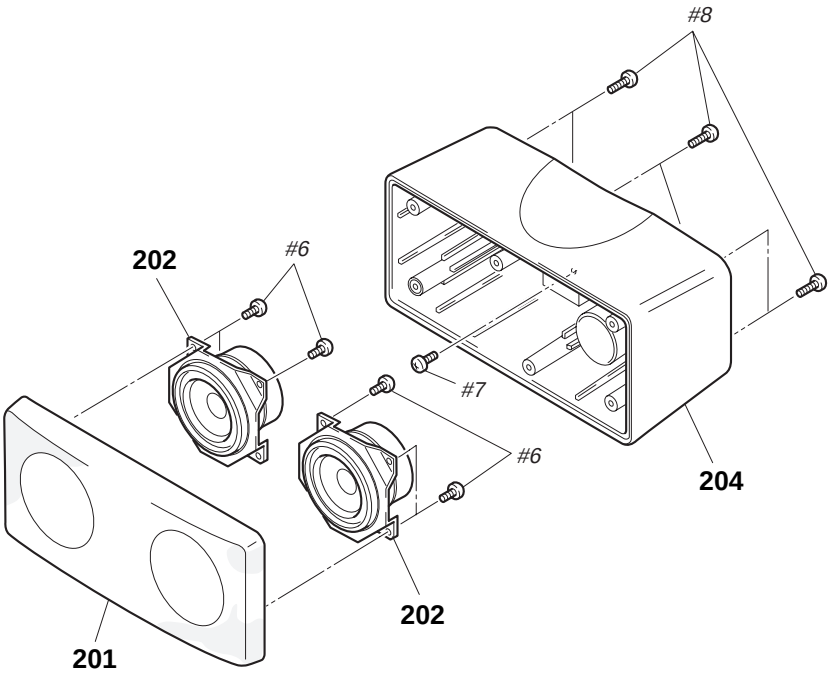
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

4-4. REAR SPEAKER SECTION (SS-SR171)



Ref. No.	Part No.	Description	Remarks
151	X-4948-740-1	PANEL ASSY, FRONT	
152	1-505-682-11	SPEAKER (8cm)	
153	1-765-663-11	CORD	
155	4-929-125-01	SCREW (M4X16), TAPPING	

4-5. EXTERNAL CENTER SPEAKER SECTION (SS-CN15VA)



Ref. No.	Part No.	Description	Remarks
201	X-4950-386-1	PANEL ASSY, FRONT	
202	1-505-298-11	SPEAKER (8CM)	
204	X-4945-977-1	CABINET ASSY, SPEAKER	

SECTION 5
ELECTRICAL PARTS LIST

DISPLAY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Abbreviation
  CND : Canadian
  SP : Singapore
  MY : Malaysia

Ref. No.	Part No.	Description			Remarks
*	A-4414-392-A	DISPLAY BOARD, COMPLETE			
		**********			
*	4-991-276-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C501	1-124-261-00	ELECT	10uF	20%	50V
C502	1-124-261-00	ELECT	10uF	20%	50V
C503	1-164-159-21	CERAMIC	0.1uF		50V
C504	1-164-159-21	CERAMIC	0.1uF		50V
C505	1-164-159-21	CERAMIC	0.1uF		50V
C506	1-126-177-11	ELECT	100uF	20%	10V
C507	1-104-905-11	CAPACITOR	0.22F		5.5V
C508	1-164-159-21	CERAMIC	0.1uF		50V
C509	1-124-465-00	ELECT	0.47uF	20%	50V
C510	1-164-159-21	CERAMIC	0.1uF		50V
C512	1-164-159-21	CERAMIC	0.1uF		50V
C513	1-126-154-11	ELECT	47uF	20%	6.3V
C514	1-126-177-11	ELECT	100uF	20%	10V
		< CONNECTOR >			
* CN152	1-568-867-11	SOCKET, CONNECTOR 25P			
* CN501	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P			
		< DIODE >			
D501	8-719-991-33	DIODE 1SS133T-77			
D502	8-719-991-33	DIODE 1SS133T-77			
D503	8-719-991-33	DIODE 1SS133T-77			
D506	8-719-991-33	DIODE 1SS133T-77			
D507	8-719-991-33	DIODE 1SS133T-77			
		< FILTER >			
FL501	1-517-673-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC501	8-759-532-57	IC uPD78043FGF-046-3B9			
IC502	8-759-165-81	IC PST600D-T			
		< COIL >			
L501	1-408-080-00	INDUCTOR 100uH			
		< TRANSISTOR >			
Q501	8-729-119-79	TRANSISTOR 2SC2785-FEK			
Q504	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q505	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q506	8-729-900-63	TRANSISTOR DTA124ES			

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
R501	1-247-807-31	CARBON	100	5%	1/4W
R502	1-247-807-31	CARBON	100	5%	1/4W
R503	1-247-807-31	CARBON	100	5%	1/4W
R504	1-247-807-31	CARBON	100	5%	1/4W
R505	1-247-807-31	CARBON	100	5%	1/4W
R506	1-247-807-31	CARBON	100	5%	1/4W
R507	1-249-417-11	CARBON	1K	5%	1/4W F
R508	1-249-417-11	CARBON	1K	5%	1/4W F
R509	1-249-417-11	CARBON	1K	5%	1/4W F
R511	1-247-807-31	CARBON	100	5%	1/4W
R512	1-249-417-11	CARBON	1K	5%	1/4W F
R513	1-249-417-11	CARBON	1K	5%	1/4W F
R515	1-249-417-11	CARBON	1K	5%	1/4W F
R516	1-249-417-11	CARBON	1K	5%	1/4W F
R518	1-249-417-11	CARBON	1K	5%	1/4W F
R519	1-249-417-11	CARBON	1K	5%	1/4W F
R520	1-249-429-11	CARBON	10K	5%	1/4W
R521	1-249-429-11	CARBON	10K	5%	1/4W
R522	1-249-427-11	CARBON	6.8K	5%	1/4W F
R526	1-249-427-11	CARBON	6.8K	5%	1/4W F
R530	1-249-429-11	CARBON	10K	5%	1/4W
R534	1-247-815-91	CARBON	220	5%	1/4W
R535	1-249-407-11	CARBON	150	5%	1/4W F
R536	1-247-815-91	CARBON	220	5%	1/4W
R537	1-249-437-11	CARBON	47K	5%	1/4W
R538	1-249-437-11	CARBON	47K	5%	1/4W
R539	1-249-437-11	CARBON	47K	5%	1/4W
R540	1-249-437-11	CARBON	47K	5%	1/4W
R541	1-249-437-11	CARBON	47K	5%	1/4W
R542	1-249-437-11	CARBON	47K	5%	1/4W
R543	1-249-437-11	CARBON	47K	5%	1/4W
R544	1-249-437-11	CARBON	47K	5%	1/4W
R545	1-249-437-11	CARBON	47K	5%	1/4W
R546	1-249-437-11	CARBON	47K	5%	1/4W
R547	1-249-437-11	CARBON	47K	5%	1/4W
R548	1-249-437-11	CARBON	47K	5%	1/4W
R549	1-249-437-11	CARBON	47K	5%	1/4W
R550	1-249-437-11	CARBON	47K	5%	1/4W
R551	1-249-437-11	CARBON	47K	5%	1/4W
R552	1-249-437-11	CARBON	47K	5%	1/4W
R553	1-249-437-11	CARBON	47K	5%	1/4W
R554	1-249-437-11	CARBON	47K	5%	1/4W
R555	1-249-417-11	CARBON	1K	5%	1/4W F
R556	1-249-429-11	CARBON	10K	5%	1/4W
R560	1-249-415-11	CARBON	680	5%	1/4W F

DISPLAY | DOLBY

Ref. No.	Part No.	Description			Remarks
R561	1-249-415-11	CARBON	680	5%	1/4W F
R562	1-249-437-11	CARBON	47K	5%	1/4W
R563	1-249-437-11	CARBON	47K	5%	1/4W
R564	1-247-807-31	CARBON	100	5%	1/4W
R566	1-249-425-11	CARBON	4.7K	5%	1/4W F
R570	1-247-895-91	CARBON	470K	5%	1/4W
R571	1-247-895-91	CARBON	470K	5%	1/4W
R572	1-249-425-11	CARBON	4.7K	5%	1/4W F
R573	1-249-425-11	CARBON	4.7K	5%	1/4W F
R574	1-249-437-11	CARBON	47K	5%	1/4W
		< VIBRATOR >			
X501	1-579-233-11	VIBRATOR, CERAMIC 5MHz			

****

*	A-4414-396-A	DOLBY BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C400	1-102-951-00	CERAMIC	15PF	5%	50V
C401	1-136-165-00	FILM	0.1uF	5%	50V
C402	1-102-852-91	CERAMIC	47PF	5%	50V
C403	1-130-469-00	MYLAR	680PF	5%	50V
C404	1-136-157-00	FILM	0.022uF	5%	50V
C405	1-102-973-00	CERAMIC	100PF	5%	50V
C406	1-102-953-00	CERAMIC	18PF	5%	50V
C407	1-136-161-00	FILM	0.047uF	5%	50V
C408	1-126-934-11	ELECT	220uF	20%	16V
C409	1-126-964-11	ELECT	10uF	20%	50V
C410	1-126-934-11	ELECT	220uF	20%	16V
C411	1-126-964-11	ELECT	10uF	20%	50V
C412	1-136-164-00	FILM	0.082uF	5%	50V
C413	1-126-959-11	ELECT	0.47uF	20%	50V
C414	1-126-964-11	ELECT	10uF	20%	50V
C415	1-137-367-11	FILM	0.0033uF	5%	50V
C416	1-136-177-00	FILM	1uF	5%	50V
C418	1-126-964-11	ELECT	10uF	20%	50V
C419	1-136-164-00	FILM	0.082uF	5%	50V
C420	1-126-934-11	ELECT	220uF	20%	16V
C421	1-136-177-00	FILM	1uF	5%	50V
C422	1-126-959-11	ELECT	0.47uF	20%	50V
C423	1-126-960-11	ELECT	1uF	20%	50V
C424	1-126-935-11	ELECT	470uF	20%	16V
C425	1-126-960-11	ELECT	1uF	20%	50V
C426	1-124-252-00	ELECT	0.33uF	20%	50V
C427	1-136-177-00	FILM	1uF	5%	50V
C428	1-136-177-00	FILM	1uF	5%	50V
C429	1-126-965-11	ELECT	22uF	20%	50V
C432	1-126-964-11	ELECT	10uF	20%	50V
C434	1-136-165-00	FILM	0.1uF	5%	50V
C435	1-136-165-00	FILM	0.1uF	5%	50V
C436	1-126-964-11	ELECT	10uF	20%	50V
C438	1-126-964-11	ELECT	10uF	20%	50V
C440	1-136-165-00	FILM	0.1uF	5%	50V
C441	1-136-165-00	FILM	0.1uF	5%	50V
C442	1-126-964-11	ELECT	10uF	20%	50V
C444	1-126-959-11	ELECT	0.47uF	20%	50V
C445	1-126-959-11	ELECT	0.47uF	20%	50V
C446	1-126-963-11	ELECT	4.7uF	20%	50V

Ref. No.	Part No.	Description			Remarks
C447	1-126-963-11	ELECT	4.7uF	20%	50V
C448	1-126-959-11	ELECT	0.47uF	20%	50V
C449	1-126-959-11	ELECT	0.47uF	20%	50V
C450	1-126-963-11	ELECT	4.7uF	20%	50V
C451	1-126-963-11	ELECT	4.7uF	20%	50V
C452	1-124-250-11	ELECT	0.15uF	20%	50V
C453	1-124-250-11	ELECT	0.15uF	20%	50V
C454	1-126-962-11	ELECT	3.3uF	20%	50V
C455	1-126-962-11	ELECT	3.3uF	20%	50V
C456	1-124-250-11	ELECT	0.15uF	20%	50V
C457	1-124-250-11	ELECT	0.15uF	20%	50V
C458	1-126-964-11	ELECT	10uF	20%	50V
C460	1-126-960-11	ELECT	1uF	20%	50V
C461	1-162-286-21	CERAMIC	220PF	10%	50V
C462	1-162-286-21	CERAMIC	220PF	10%	50V
C463	1-162-286-21	CERAMIC	220PF	10%	50V
C464	1-162-286-21	CERAMIC	220PF	10%	50V
C465	1-162-286-21	CERAMIC	220PF	10%	50V
C466	1-162-286-21	CERAMIC	220PF	10%	50V
C467	1-126-960-11	ELECT	1uF	20%	50V
C468	1-126-960-11	ELECT	1uF	20%	50V
C469	1-126-960-11	ELECT	1uF	20%	50V
C470	1-126-960-11	ELECT	1uF	20%	50V
C471	1-126-934-11	ELECT	220uF	20%	16V
C473	1-126-960-11	ELECT	1uF	20%	50V
C474	1-164-159-21	CERAMIC	0.1uF		50V
C476	1-102-518-11	CERAMIC	33PF	5%	50V
C495	1-136-165-00	FILM	0.1uF	5%	50V
		< CONNECTOR >			
CN401	1-770-726-11	CONNECTOR, BOARD TO BOARD 6P			
CN402	1-779-939-11	CONNECTOR, BOARD TO BOARD 7P			
		< IC >			
IC400	8-759-528-36	IC CXA8081S			
IC401	8-759-528-35	IC CXA8079S			
		< JACK >			
J401	1-784-935-11	JACK, PIN 6P (5.1/DVD IN)			
		< COIL >			
L400	1-410-509-11	INDUCTOR 10uH			
		< RESISTOR >			
R400	1-249-441-11	CARBON	100K	5%	1/4W
R401	1-249-436-11	CARBON	39K	5%	1/4W
R451	1-249-439-11	CARBON	68K	5%	1/4W
R458	1-249-436-11	CARBON	39K	5%	1/4W
R461	1-249-417-11	CARBON	1K	5%	1/4W F
R462	1-249-417-11	CARBON	1K	5%	1/4W F
R463	1-249-417-11	CARBON	1K	5%	1/4W F
R464	1-249-417-11	CARBON	1K	5%	1/4W F
R465	1-249-417-11	CARBON	1K	5%	1/4W F
R466	1-249-417-11	CARBON	1K	5%	1/4W F
R467	1-247-895-91	CARBON	470K	5%	1/4W
R468	1-247-895-91	CARBON	470K	5%	1/4W
R469	1-247-895-91	CARBON	470K	5%	1/4W
R470	1-247-895-91	CARBON	470K	5%	1/4W
R471	1-247-895-91	CARBON	470K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R472	1-247-895-91	CARBON	470K	5%	1/4W
		< DIODE >			
SVC201	8-719-070-77	DIODE SVC201SPA-M1-AC			
**********					
*	1-670-186-11	KEY BOARD			
		**********			
		< CAPACITOR >			
C511	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< DIODE >			
D504	8-719-313-43	DIODE SEL6210S-TH10 (STANDBY)			
D505	8-719-045-89	DIODE SML16760CN (ON)			
		< IC >			
IC503	8-749-011-05	IC GP1U28X (REMOTE SENSOR)			
		< RESISTOR >			
R523	1-249-417-11	CARBON	1K	5%	1/4W F
R524	1-249-419-11	CARBON	1.5K	5%	1/4W F
R525	1-249-421-11	CARBON	2.2K	5%	1/4W F
R527	1-249-417-11	CARBON	1K	5%	1/4W F
R528	1-249-419-11	CARBON	1.5K	5%	1/4W F
R529	1-249-421-11	CARBON	2.2K	5%	1/4W F
R557	1-247-843-11	CARBON	3.3K	5%	1/4W
R567	1-249-417-11	CARBON	1K	5%	1/4W F
		< SWITCH >			
S501	1-762-875-21	SWITCH, KEYBOARD (INPUT)			
S502	1-762-875-21	SWITCH, KEYBOARD (S.WOOFER)			
S503	1-762-875-21	SWITCH, KEYBOARD (SURROUND)			
S504	1-762-875-21	SWITCH, KEYBOARD (CENTER MODE)			
S505	1-762-875-21	SWITCH, KEYBOARD (MASTER VOL +)			
S506	1-762-875-21	SWITCH, KEYBOARD (MASTER VOL –)			
S507	1-762-875-21	SWITCH, KEYBOARD (POWER)			
**********					
*	A-4414-398-A	MAIN BOARD, COMPLETE (US, CND)			
		**********			
*	A-4414-402-A	MAIN BOARD, COMPLETE (SP, MY)			
		**********			
		(Included INPUT BOARD)			
		< CAPACITOR >			
C101	1-162-286-21	CERAMIC	220PF	10%	50V
C102	1-162-286-21	CERAMIC	220PF	10%	50V
C109	1-126-960-11	ELECT	1uF	20%	50V
C110	1-126-960-11	ELECT	1uF	20%	50V
C161	1-162-286-21	CERAMIC	220PF	10%	50V
C162	1-162-286-21	CERAMIC	220PF	10%	50V
C165	1-126-964-11	ELECT	10uF	20%	50V
C166	1-126-964-11	ELECT	10uF	20%	50V
C167	1-126-964-11	ELECT	10uF	20%	50V
C168	1-126-964-11	ELECT	10uF	20%	50V
C169	1-126-964-11	ELECT	10uF	20%	50V
C201	1-126-960-11	ELECT	1uF	20%	50V
C203	1-126-960-11	ELECT	1uF	20%	50V
C204	1-126-933-11	ELECT	100uF	20%	16V
C205	1-126-960-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description			Remarks
C207	1-126-960-11	ELECT	1uF	20%	50V
C208	1-126-964-11	ELECT	10uF	20%	50V
C211	1-126-960-11	ELECT	1uF	20%	50V
C212	1-126-960-11	ELECT	1uF	20%	50V
C213	1-136-168-00	FILM	0.18uF	5%	50V
C214	1-136-168-00	FILM	0.18uF	5%	50V
C215	1-126-960-11	ELECT	1uF	20%	50V
C216	1-126-964-11	ELECT	10uF	20%	50V
C217	1-126-960-11	ELECT	1uF	20%	50V
C219	1-126-960-11	ELECT	1uF	20%	50V
C220	1-136-165-00	FILM	0.1uF	5%	50V
C221	1-126-960-11	ELECT	1uF	20%	50V
C222	1-126-960-11	ELECT	1uF	20%	50V
C223	1-136-168-00	FILM	0.18uF	5%	50V
C225	1-126-960-11	ELECT	1uF	20%	50V
C226	1-128-551-11	ELECT	22uF	20%	25V
C227	1-126-960-11	ELECT	1uF	20%	50V
C228	1-162-294-31	CERAMIC	0.001uF	10%	50V
C231	1-137-367-11	FILM	0.0033uF	5%	50V
C232	1-136-157-00	FILM	0.022uF	5%	50V
C240	1-126-960-11	ELECT	1uF	20%	50V
C251	1-126-933-11	ELECT	100uF	20%	16V
C252	1-126-964-11	ELECT	10uF	20%	50V
C253	1-137-367-11	FILM	0.0033uF	5%	50V
C254	1-136-157-00	FILM	0.022uF	5%	50V
C256	1-126-960-11	ELECT	1uF	20%	50V
C257	1-126-960-11	ELECT	1uF	20%	50V
C258	1-126-964-11	ELECT	10uF	20%	50V
C259	1-137-367-11	FILM	0.0033uF	5%	50V
C260	1-136-157-00	FILM	0.022uF	5%	50V
C262	1-126-960-11	ELECT	1uF	20%	50V
C263	1-126-960-11	ELECT	1uF	20%	50V
C265	1-126-960-11	ELECT	1uF	20%	50V
C266	1-128-551-11	ELECT	22uF	20%	25V
C267	1-126-960-11	ELECT	1uF	20%	50V
C281	1-126-960-11	ELECT	1uF	20%	50V
C282	1-136-159-00	FILM	0.033uF	5%	50V
C283	1-136-159-00	FILM	0.033uF	5%	50V
C284	1-137-437-11	FILM	0.0056uF	5%	50V
C285	1-137-437-11	FILM	0.0056uF	5%	50V
C286	1-136-159-00	FILM	0.033uF	5%	50V
C287	1-136-159-00	FILM	0.033uF	5%	50V
C288	1-136-159-00	FILM	0.033uF	5%	50V
C289	1-136-159-00	FILM	0.033uF	5%	50V
C290	1-126-960-11	ELECT	1uF	20%	50V
C291	1-126-960-11	ELECT	1uF	20%	50V
C293	1-126-960-11	ELECT	1uF	20%	50V
C294	1-126-960-11	ELECT	1uF	20%	50V
C296	1-126-960-11	ELECT	1uF	20%	50V
C297	1-162-294-31	CERAMIC	0.001uF	10%	50V
C303	1-136-169-00	FILM	0.22uF	5%	50V
C304	1-136-169-00	FILM	0.22uF	5%	50V
C305	1-136-169-00	FILM	0.22uF	5%	50V
C306	1-136-169-00	FILM	0.22uF	5%	50V
C321	1-126-960-11	ELECT	1uF	20%	50V
C322	1-126-961-11	ELECT	2.2uF	20%	50V
C331	1-126-960-11	ELECT	1uF	20%	50V
C332	1-126-961-11	ELECT	2.2uF	20%	50V
C341	1-126-960-11	ELECT	1uF	20%	50V
C342	1-126-961-11	ELECT	2.2uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remarks
C351	1-126-960-11	ELECT	1uF	20%	50V
C352	1-126-961-11	ELECT	2.2uF	20%	50V
C353	1-126-960-11	ELECT	1uF	20%	50V
C354	1-126-961-11	ELECT	2.2uF	20%	50V
C355	1-126-960-11	ELECT	1uF	20%	50V
C356	1-126-960-11	ELECT	1uF	20%	50V
C360	1-126-961-11	ELECT	2.2uF	20%	50V
C361	1-126-960-11	ELECT	1uF	20%	50V
C371	1-104-664-11	ELECT	47uF	20%	25V
C372	1-104-664-11	ELECT	47uF	20%	25V
C373	1-136-165-00	FILM	0.1uF	5%	50V
C374	1-136-165-00	FILM	0.1uF	5%	50V
C375	1-126-960-11	ELECT	1uF	20%	50V
C376	1-126-960-11	ELECT	1uF	20%	50V
C377	1-162-286-21	CERAMIC	220PF	10%	50V
C378	1-126-964-11	ELECT	10uF	20%	50V
C379	1-126-964-11	ELECT	10uF	20%	50V
C380	1-162-282-31	CERAMIC	100PF	10%	50V
C381	1-162-282-31	CERAMIC	100PF	10%	50V
C382	1-162-282-31	CERAMIC	100PF	10%	50V
C383	1-162-282-31	CERAMIC	100PF	10%	50V
C801	1-104-664-11	ELECT	47uF	20%	25V
C803	1-126-959-11	ELECT	0.47uF	20%	50V
C921	1-126-950-11	ELECT	330uF	20%	35V
C922	1-126-941-11	ELECT	470uF	20%	25V
C923	1-126-933-11	ELECT	100uF	20%	16V
		< CONNECTOR >			
* CN101	1-568-867-11	SOCKET, CONNECTOR 25P			
CN104	1-778-241-11	CONNECTOR, BOARD TO BOARD 5P			
CN105	1-770-728-11	CONNECTOR, BOARD TO BOARD 9P			
CN201	1-770-722-11	CONNECTOR, BOARD TO BOARD 6P			
* CN202	1-774-813-11	CONNECTOR, BOARD TO BOARD 7P			
		< DIODE >			
D101	8-719-991-33	DIODE 1SS133T-77			
D102	8-719-991-33	DIODE 1SS133T-77			
D303	8-719-991-33	DIODE 1SS133T-77			
D804	8-719-933-59	DIODE HZS9C1L			
D805	8-719-991-33	DIODE 1SS133T-77			
D806	8-719-991-33	DIODE 1SS133T-77			
D807	8-719-991-33	DIODE 1SS133T-77			
D808	8-719-991-33	DIODE 1SS133T-77			
D921	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC103	8-759-634-51	IC M5218AP			
IC201	8-759-443-67	IC LC75373ED			
IC251	8-759-443-67	IC LC75373ED			
IC301	8-759-634-51	IC M5218AP			
IC302	8-759-634-51	IC M5218AP			
IC303	8-759-634-51	IC M5218AP			
IC304	8-759-281-42	IC TC9210P			
IC305	8-759-634-51	IC M5218AP			

Ref. No.	Part No.	Description			Remarks
		< JACK >			
J101	1-779-688-11	JACK, PIN 6P (1/2)			
J103	1-774-136-11	CONNECTOR, ROUND TYPE 6P (WIRELESS REAR SPEAKER)			
J801	1-566-819-41	JACK 1P (CONTROL S) (US, CND)			
		< TRANSISTOR >			
Q301	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q321	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q322	8-729-900-63	TRANSISTOR DTA124ES			
Q331	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q341	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q342	8-729-900-63	TRANSISTOR DTA124ES			
Q351	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q352	8-729-900-63	TRANSISTOR DTA124ES			
Q353	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q361	8-729-141-30	TRANSISTOR 2SC3623A-LK			
Q362	8-729-900-63	TRANSISTOR DTA124ES			
Q803	8-729-111-29	TRANSISTOR 2SD1616A-K			
Q804	8-729-116-59	TRANSISTOR 2SB1068TP			
Q921	8-729-119-79	TRANSISTOR 2SC2785-FEK			
Q922	8-729-030-19	TRANSISTOR 2SB1640			
		< RESISTOR >			
R101	1-249-417-11	CARBON	1K	5%	1/4W F
R102	1-249-417-11	CARBON	1K	5%	1/4W F
R103	1-247-895-91	CARBON	470K	5%	1/4W
R104	1-247-895-91	CARBON	470K	5%	1/4W
R118	1-249-441-11	CARBON	100K	5%	1/4W
R119	1-249-413-11	CARBON	470	5%	1/4W F
R120	1-249-441-11	CARBON	100K	5%	1/4W
R121	1-249-441-11	CARBON	100K	5%	1/4W
R122	1-249-441-11	CARBON	100K	5%	1/4W
R123	1-249-441-11	CARBON	100K	5%	1/4W
R124	1-249-441-11	CARBON	100K	5%	1/4W
R125	1-249-441-11	CARBON	100K	5%	1/4W
R128	1-249-413-11	CARBON	470	5%	1/4W F
R151	1-249-417-11	CARBON	1K	5%	1/4W F
R152	1-249-417-11	CARBON	1K	5%	1/4W F
R153	1-247-895-91	CARBON	470K	5%	1/4W
R154	1-247-895-91	CARBON	470K	5%	1/4W
R161	1-247-815-91	CARBON	220	5%	1/4W
R162	1-247-815-91	CARBON	220	5%	1/4W
R200	1-249-432-11	CARBON	18K	5%	1/4W
R201	1-247-843-11	CARBON	3.3K	5%	1/4W
R202	1-249-430-11	CARBON	12K	5%	1/4W
R203	1-249-430-11	CARBON	12K	5%	1/4W
R205	1-249-425-11	CARBON	4.7K	5%	1/4W F
R231	1-249-427-11	CARBON	6.8K	5%	1/4W F
R232	1-249-441-11	CARBON	100K	5%	1/4W
R233	1-249-441-11	CARBON	100K	5%	1/4W
R281	1-249-435-11	CARBON	33K	5%	1/4W
R282	1-249-439-11	CARBON	68K	5%	1/4W
R283	1-249-429-11	CARBON	10K	5%	1/4W
R284	1-247-852-11	CARBON	7.5K	5%	1/4W
R285	1-249-436-11	CARBON	39K	5%	1/4W
R286	1-247-876-11	CARBON	75K	5%	1/4W
R287	1-249-439-11	CARBON	68K	5%	1/4W
R288	1-249-435-11	CARBON	33K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R289	1-249-417-11	CARBON	1K	5%	1/4W F
R290	1-249-417-11	CARBON	1K	5%	1/4W F
R291	1-247-863-91	CARBON	22K	5%	1/4W
R292	1-247-863-91	CARBON	22K	5%	1/4W
R293	1-247-889-00	CARBON	270K	5%	1/4W
R294	1-247-889-00	CARBON	270K	5%	1/4W
R295	1-247-889-00	CARBON	270K	5%	1/4W
R296	1-249-417-11	CARBON	1K	5%	1/4W F
R303	1-249-417-11	CARBON	1K	5%	1/4W F
R304	1-249-418-11	CARBON	1.2K	5%	1/4W F
R305	1-249-418-11	CARBON	1.2K	5%	1/4W F
R306	1-249-417-11	CARBON	1K	5%	1/4W F
R307	1-249-417-11	CARBON	1K	5%	1/4W F
R308	1-247-887-00	CARBON	220K	5%	1/4W
R309	1-249-429-11	CARBON	10K	5%	1/4W
R310	1-249-431-11	CARBON	15K	5%	1/4W
R311	1-249-435-11	CARBON	33K	5%	1/4W
R312	1-249-421-11	CARBON	2.2K	5%	1/4W F
R313	1-247-876-11	CARBON	75K	5%	1/4W
R314	1-249-441-11	CARBON	100K	5%	1/4W
R315	1-249-441-11	CARBON	100K	5%	1/4W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-247-863-91	CARBON	22K	5%	1/4W
R320	1-247-863-91	CARBON	22K	5%	1/4W
R321	1-249-441-11	CARBON	100K	5%	1/4W
R322	1-249-421-11	CARBON	2.2K	5%	1/4W F
R323	1-249-429-11	CARBON	10K	5%	1/4W
R325	1-249-437-11	CARBON	47K	5%	1/4W
R331	1-249-441-11	CARBON	100K	5%	1/4W
R332	1-249-421-11	CARBON	2.2K	5%	1/4W F
R333	1-249-429-11	CARBON	10K	5%	1/4W
R341	1-249-441-11	CARBON	100K	5%	1/4W
R342	1-249-421-11	CARBON	2.2K	5%	1/4W F
R343	1-249-429-11	CARBON	10K	5%	1/4W
R345	1-249-437-11	CARBON	47K	5%	1/4W
R351	1-249-441-11	CARBON	100K	5%	1/4W
R352	1-249-421-11	CARBON	2.2K	5%	1/4W F
R353	1-249-429-11	CARBON	10K	5%	1/4W
R354	1-249-441-11	CARBON	100K	5%	1/4W
R355	1-249-437-11	CARBON	47K	5%	1/4W
R356	1-249-429-11	CARBON	10K	5%	1/4W
R357	1-249-421-11	CARBON	2.2K	5%	1/4W F
R361	1-249-441-11	CARBON	100K	5%	1/4W
R362	1-249-421-11	CARBON	2.2K	5%	1/4W F
R363	1-249-429-11	CARBON	10K	5%	1/4W
R365	1-249-437-11	CARBON	47K	5%	1/4W
R370	1-249-441-11	CARBON	100K	5%	1/4W
R371	1-249-441-11	CARBON	100K	5%	1/4W
R372	1-249-441-11	CARBON	100K	5%	1/4W
R373	1-249-441-11	CARBON	100K	5%	1/4W
R374	1-249-437-11	CARBON	47K	5%	1/4W
R375	1-249-437-11	CARBON	47K	5%	1/4W
R376	1-249-437-11	CARBON	47K	5%	1/4W
R377	1-249-437-11	CARBON	47K	5%	1/4W
R381	1-247-807-31	CARBON	100	5%	1/4W
R382	1-247-807-31	CARBON	100	5%	1/4W
R383	1-247-807-31	CARBON	100	5%	1/4W
R384	1-247-807-31	CARBON	100	5%	1/4W
R385	1-247-807-31	CARBON	100	5%	1/4W
R386	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R387	1-249-417-11	CARBON	1K	5%	1/4W F
R388	1-249-417-11	CARBON	1K	5%	1/4W F
R390	1-249-417-11	CARBON	1K	5%	1/4W F
R391	1-249-417-11	CARBON	1K	5%	1/4W F
R399	1-249-417-11	CARBON	1K	5%	1/4W F
R809	1-247-807-31	CARBON	100	5%	1/4W
R810	1-249-393-11	CARBON	10	5%	1/4W F
R811	1-249-437-11	CARBON	47K	5%	1/4W
R812	1-249-437-11	CARBON	47K	5%	1/4W
R813	1-249-441-11	CARBON	100K	5%	1/4W
R814	1-249-425-11	CARBON	4.7K	5%	1/4W F
R815	1-249-429-11	CARBON	10K	5%	1/4W
R809	1-247-807-31	CARBON	100	5%	1/4W
R810	1-249-393-11	CARBON	10	5%	1/4W F
R811	1-249-437-11	CARBON	47K	5%	1/4W
R812	1-249-437-11	CARBON	47K	5%	1/4W
R813	1-249-441-11	CARBON	100K	5%	1/4W
R814	1-249-425-11	CARBON	4.7K	5%	1/4W F
R815	1-249-429-11	CARBON	10K	5%	1/4W
R921	1-249-425-11	CARBON	4.7K	5%	1/4W F
R922	1-249-435-11	CARBON	33K	5%	1/4W
R923	1-249-421-11	CARBON	2.2K	5%	1/4W F
R924	1-249-421-11	CARBON	2.2K	5%	1/4W F
R927	1-249-474-11	CARBON	1	5%	1/2W F

< SWITCH >

S801	1-571-588-11	SWITCH, SLIDE (VOLUME SYNCRO)

****

*	A-4414-394-A	POWER BOARD, COMPLETE			
		**********			
		(Included POW-LR/CSW/SR BOARD)			

< CAPACITOR >

C601	1-162-294-31	CERAMIC	0.001uF	10%	50V
C602	1-162-282-31	CERAMIC	100PF	10%	50V
C603	1-104-664-11	ELECT	47uF	20%	25V
C604	1-162-191-31	CERAMIC	2.2PF	10%	50V
C605	1-162-294-31	CERAMIC	0.001uF	10%	50V
C606	1-162-282-31	CERAMIC	100PF	10%	50V
C607	1-104-664-11	ELECT	47uF	20%	25V
C608	1-162-191-31	CERAMIC	2.2PF	10%	50V
C609	1-162-294-31	CERAMIC	0.001uF	10%	50V
C610	1-162-282-31	CERAMIC	100PF	10%	50V
C611	1-104-664-11	ELECT	47uF	20%	25V
C612	1-162-191-31	CERAMIC	2.2PF	10%	50V
C613	1-162-294-31	CERAMIC	0.001uF	10%	50V
C614	1-162-282-31	CERAMIC	100PF	10%	50V
C615	1-104-664-11	ELECT	47uF	20%	25V
C616	1-162-191-31	CERAMIC	2.2PF	10%	50V
C617	1-162-294-31	CERAMIC	0.001uF	10%	50V
C618	1-162-282-31	CERAMIC	100PF	10%	50V
C619	1-104-664-11	ELECT	47uF	20%	25V
C620	1-162-191-31	CERAMIC	2.2PF	10%	50V
C621	1-126-964-11	ELECT	10uF	20%	50V
C622	1-126-964-11	ELECT	10uF	20%	50V
C623	1-126-964-11	ELECT	10uF	20%	50V
C624	1-126-964-11	ELECT	10uF	20%	50V
C625	1-136-165-00	FILM	0.1uF	5%	50V

POWER PS

Ref. No.	Part No.	Description			Remarks
C626	1-136-165-00	FILM	0.1uF	5%	50V
C627	1-136-165-00	FILM	0.1uF	5%	50V
C628	1-136-165-00	FILM	0.1uF	5%	50V
C629	1-136-165-00	FILM	0.1uF	5%	50V
C630	1-136-165-00	FILM	0.1uF	5%	50V
C631	1-126-960-11	ELECT	1uF	20%	50V
C632	1-126-960-11	ELECT	1uF	20%	50V
C633	1-126-960-11	ELECT	1uF	20%	50V
C634	1-126-960-11	ELECT	1uF	20%	50V
C635	1-136-165-00	FILM	0.1uF	5%	50V
C636	1-136-165-00	FILM	0.1uF	5%	50V
C640	1-126-964-11	ELECT	10uF	20%	50V
C641	1-126-964-11	ELECT	10uF	20%	50V
C642	1-162-294-31	CERAMIC	0.001uF	10%	50V
C643	1-162-282-31	CERAMIC	100PF	10%	50V
C644	1-104-664-11	ELECT	47uF	20%	25V
C645	1-162-191-31	CERAMIC	2.2PF	10%	50V
		< CONNECTOR >			
CN153	1-784-980-11	PLUG, CONNECTOR 9P			
CN601	1-784-981-11	PIN, CONNECTOR 3P			
* CN605	1-580-376-11	PLUG (WITH CONNECTOR) (L) 10P			
		< DIODE >			
D631	8-719-991-33	DIODE 1SS133T-77			
D632	8-719-991-33	DIODE 1SS133T-77			
D701	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC601	8-759-502-31	IC SI-18751			
IC602	8-759-502-31	IC SI-18751			
IC603	8-759-502-31	IC SI-18751			
IC604	8-759-502-31	IC SI-18751			
IC605	8-759-502-31	IC SI-18751			
IC606	8-759-502-31	IC SI-18751			
		< RESISTOR >			
R601	1-249-435-11	CARBON	33K	5%	1/4W
R602	1-249-418-11	CARBON	1.2K	5%	1/4W F
R603	1-249-435-11	CARBON	33K	5%	1/4W
R604	1-249-435-11	CARBON	33K	5%	1/4W
R605	1-249-418-11	CARBON	1.2K	5%	1/4W F
R606	1-249-435-11	CARBON	33K	5%	1/4W
R607	1-249-435-11	CARBON	33K	5%	1/4W
R608	1-249-415-11	CARBON	680	5%	1/4W F
R609	1-249-435-11	CARBON	33K	5%	1/4W
R610	1-249-435-11	CARBON	33K	5%	1/4W
R611	1-249-411-11	CARBON	330	5%	1/4W
R612	1-249-435-11	CARBON	33K	5%	1/4W
R613	1-249-435-11	CARBON	33K	5%	1/4W
R614	1-249-414-11	CARBON	560	5%	1/4W F
R615	1-249-435-11	CARBON	33K	5%	1/4W
⚠R616	1-249-381-11	CARBON	1	5%	1/4W F
⚠R617	1-249-381-11	CARBON	1	5%	1/4W F
⚠R618	1-249-381-11	CARBON	1	5%	1/4W F
⚠R619	1-249-381-11	CARBON	1	5%	1/4W F
⚠R620	1-249-381-11	CARBON	1	5%	1/4W F

Ref. No.	Part No.	Description			Remarks
⚠R621	1-249-381-11	CARBON	1	5%	1/4W F
R622	1-249-435-11	CARBON	33K	5%	1/4W
R623	1-249-414-11	CARBON	560	5%	1/4W F
R624	1-249-435-11	CARBON	33K	5%	1/4W
R631	1-249-401-11	CARBON	47	5%	1/4W F
R701	1-249-437-11	CARBON	47K	5%	1/4W
R702	1-249-437-11	CARBON	47K	5%	1/4W
R703	1-249-437-11	CARBON	47K	5%	1/4W
R704	1-249-437-11	CARBON	47K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-249-437-11	CARBON	47K	5%	1/4W
⚠R713	1-249-399-11	CARBON	33	5%	1/4W F
⚠R714	1-249-399-11	CARBON	33	5%	1/4W F
⚠R715	1-249-399-11	CARBON	33	5%	1/4W F
		< RELAY >			
RY701	1-755-142-11	RELAY			
RY702	1-755-142-11	RELAY			
RY703	1-755-142-11	RELAY			
**********					
*	A-4414-395-A	PS BOARD, COMPLETE			
		**********			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C703	1-126-933-11	ELECT	100uF	20%	16V
C704	1-126-963-11	ELECT	4.7uF	20%	50V
C705	1-104-664-11	ELECT	47uF	20%	25V
C901	1-136-165-00	FILM	0.1uF	5%	50V
C902	1-136-165-00	FILM	0.1uF	5%	50V
C903	1-117-691-11	ELECT (BLOCK)	8200uF	20%	50V
C904	1-117-691-11	ELECT (BLOCK)	8200uF	20%	50V
C905	1-136-165-00	FILM	0.1uF	5%	50V
C906	1-136-165-00	FILM	0.1uF	5%	50V
C907	1-126-944-11	ELECT	3300uF	20%	25V
C908	1-126-940-11	ELECT	330uF	20%	25V
C909	1-126-964-11	ELECT	10uF	20%	50V
C910	1-104-665-11	ELECT	100uF	20%	10V
C912	1-126-968-11	ELECT	100uF	20%	50V
C913	1-126-964-11	ELECT	10uF	20%	50V
C914	1-126-967-11	ELECT	47uF	20%	50V
C915	1-126-964-11	ELECT	10uF	20%	50V
C916	1-126-964-11	ELECT	10uF	20%	50V
C917	1-126-964-11	ELECT	10uF	20%	50V
C918	1-126-964-11	ELECT	10uF	20%	50V
C919	1-126-968-11	ELECT	100uF	20%	50V
		< CONNECTOR >			
CN154	1-778-240-11	CONNECTOR, BOARD TO BOARD 5P			
CN155	1-770-724-11	CONNECTOR, BOARD TO BOARD 9P			
SDN701	1-782-492-11	CORD (WITH CONNECTOR)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remarks
		< DIODE >				
D901	8-719-062-39	DIODE D4SBL20UF1				
D902	8-719-200-82	DIODE 11ES2				
D903	8-719-200-82	DIODE 11ES2				
D904	8-719-200-82	DIODE 11ES2				
D905	8-719-200-82	DIODE 11ES2				
D908	8-719-991-33	DIODE 1SS133T-77				
D909	8-719-934-17	DIODE HZS27-1L				
D910	8-719-118-63	DIODE RD5.6F-T7B2				
D911	8-719-991-33	DIODE 1SS133T-77				
D912	8-719-991-33	DIODE 1SS133T-77				
D913	8-719-991-33	DIODE 1SS133T-77				
		< IC >				
IC701	8-759-111-68	IC UPC1237HA				
IC904	8-759-158-62	IC TA78057S				
IC905	8-759-604-38	IC M5F78M10				
IC906	8-759-604-44	IC M5F79M10				
		< JACK >				
J701	1-537-952-11	TERMINAL BOARD,PUSH 2P				(EXTERNAL CENTER SPEAKER)
J702	1-537-925-41	TERMINAL BOARD (REAR SPEAKER)				
		< TRANSISTOR >				
Q902	8-729-116-57	TRANSISTOR 2SB1068-K				
Q903	8-729-026-68	TRANSISTOR 2SD2525 (TP)				
		< RESISTOR >				
R710	1-249-435-11	CARBON	33K	5%	1/4W	
R711	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R712	1-249-441-11	CARBON	100K	5%	1/4W	
R906	1-247-843-11	CARBON	3.3K	5%	1/4W	
R907	1-249-437-11	CARBON	47K	5%	1/4W	
R908	1-247-807-31	CARBON	100	5%	1/4W	
R909	1-247-807-31	CARBON	100	5%	1/4W	
R910	1-249-429-11	CARBON	10K	5%	1/4W	
R912	1-215-885-00	METAL OXIDE	68	5%	2W	F
R913	1-249-429-11	CARBON	10K	5%	1/4W	
R914	1-249-429-11	CARBON	10K	5%	1/4W	
		< RELAY >				
RY901	1-515-840-11	RELAY				
		< SWITCH >				
S701	1-762-708-11	SWITCH, PUSH (1 KEY)				(EXTERNAL CENTER SPEAKER)
**********						
*	1-670-196-11	REG BOARD *********				
		< CAPACITOR >				
C924	1-126-949-11	ELECT	220uF	20%	35V	
C925	1-126-949-11	ELECT	220uF	20%	35V	
		< IC >				
IC903	8-759-605-01	IC M5F78M18L				
**********						

Ref. No.	Part No.	Description	Remarks
*	1-670-187-11	T1 BOARD ********	
	1-533-217-31	HOLDER, FUSE	
		< CONNECTOR >	
CN901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
		< FUSE >	
⚠F901	1-532-503-51	FUSE TIME LAG 1.6A (SP, MY)	
⚠F901	1-576-108-11	FUSE 4A (US, CND)	
**********			
*	1-670-188-11	T2 BOARD ********	
	1-533-217-31	HOLDER, FUSE	
		< CONNECTOR >	
CN904	1-564-511-11	PLUG, CONNECTOR 8P	
		< FUSE >	
⚠F902	1-532-504-51	FUSE TIME LAG 4A (SP, MY)	
⚠F902	1-576-110-11	FUSE 6A (US, CND)	
⚠F903	1-532-504-51	FUSE TIME LAG 4A (SP, MY)	
⚠F903	1-576-110-11	FUSE 6A (US, CND)	
		< RESISTOR >	
⚠R901	1-212-934-00	FUSIBLE 1 5% 1/2W F	
⚠R902	1-212-934-00	FUSIBLE 1 5% 1/2W F	
**********			
		MISCELLANEOUS **********	
4	1-505-681-11	SPEAKER (5cm)	
6	1-505-680-11	SPEAKER (10cm)	
15	1-773-241-11	WIRE (FLAT TYPE) (25 CORE)	
19	1-505-679-11	SPEAKER (13cm)	
53	1-505-681-11	SPEAKER (5cm)	
57	1-505-680-11	SPEAKER (10cm)	
62	1-505-679-11	SPEAKER (13cm)	
101	1-773-241-11	WIRE (FLAT TYPE) (25 CORE)	
110	1-575-042-21	CORD, POWER (US, CND)	
110	1-575-651-21	CORD, POWER (SP, MY)	
152	1-505-682-11	SPEAKER (8cm)	
153	1-765-663-11	CORD	
202	1-505-298-11	SPEAKER (8CM)	
⚠T900	1-431-864-11	TRANSFORMER, POWER (US, CND)	
⚠T900	1-431-865-11	TRANSFORMER, POWER (SP, MY)	
**********			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-475-787-11	COMMANDER, STANDARD (RM-J59)	
	1-551-734-61	CORD, CONNECTION (PIN CABLE)	
	1-751-347-11	CORD, CONNECTION (for REAR SPEAKER)	
	1-775-531-11	CORD, CONNECTION (for FRONT L-R CONNECTION)	
	1-775-728-11	CORD, SPEAKER	
	3-864-086-11	MANUAL, INSTRUCTION (ENGLISH)	
	3-864-086-21	MANUAL, INSTRUCTION (FRENCH/CHINESE) (CND, SP, MY)	
	4-972-322-01	FOOT (Y)	
*	4-991-888-01	BASE	
	4-981-643-01	BATTERY COVER (for RM-J59)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-659-79	SCREW +BVTP 4 × 8 TYPE2 IT-3	
#2	7-685-134-19	SCREW +P 2.6 × 8 TYPE2 SLIT	
#3	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S	
#4	7-685-881-09	SCREW +BVTT 4 × 8 (S)	
#5	7-621-846-60	SCREW (4 × 25), TAPPING	
#6	7-685-660-79	SCREW +P 4 × 10 TYPE2 NON-SLIT	
#7	7-685-661-79	SCREW +P 4 × 12 TYPE2 NON-SLIT	
#8	7-685-663-79	SCREW +P 4 × 16 TYPE2 NON-SLIT	